

## DOCUMENT RESUME

ED 441 922

UD 033 595

TITLE Educational Needs Assessment Report for the Pacific Region, 1997.

INSTITUTION Pacific Resources for Education and Learning, Honolulu, HI.

SPONS AGENCY Office of Educational Research and Improvement (ED), Washington, DC.

PUB DATE 1997-11-00

NOTE 84p.

CONTRACT RP91002009

PUB TYPE Numerical/Quantitative Data (110) -- Reports - Research (143) -- Tests/Questionnaires (160)

EDRS PRICE MF01/PC04 Plus Postage.

DESCRIPTORS Accountability; Curriculum Development; Educational Change; \*Elementary Secondary Education; Instruction; \*Needs Assessment; \*Professional Development; \*Systems Development; Tables (Data)

IDENTIFIERS Pacific Islands; \*Pacific Region

## ABSTRACT

To assess educational needs in the Pacific region, Pacific Resources for Education and Learning (PREL) identified 9 general education areas to be examined through 47 survey items. These items were presented as a questionnaire to educators in the region served by PREL, which includes American Samoa, the Commonwealth of the Northern Mariana Islands, the Federated States of Micronesia, Guam, Hawaii, the Republic of the Marshall Islands, and the Republic of Palau. The gap between educators' ratings of perceived importance and perceived progress for each item was regarded as a measure of the magnitude of educational need. Systemic reform, professional development, and at-risk and gifted/talented youth were identified as the three most important areas for education in the Pacific region. Planning and accountability, curriculum and instruction, and system reform were the areas in which the most progress was perceived. Use of technology, early childhood education, and at-risk and gifted/talented youth were generally identified as the three areas of most need. An appendix contains the needs survey. (Contains 36 tables and 11 figures.) (SLD)



# Educational Needs Assessment Report for the Pacific Region 1997

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

☒ This document has been reproduced as  
received from the person or organization  
originating it.

☐ Minor changes have been made to  
improve reproduction quality.

• Points of view or opinions stated in this  
document do not necessarily represent  
official OERI position or policy.

November 1997

BEST COPY AVAILABLE

**PREL**

**PACIFIC RESOURCES FOR EDUCATION AND LEARNING**

828 Fort street Mall \* Suit 500 \* Honolulu Hawaii 96813-4321

(808) 533-8000 \* Fax (808) 533-7599

e-mail: askprel @ prel.hawaii.edu

WEBSITE: <http://prel.hawaii.edu>

This publication was produced with funds from the Office of Educational Research and Improvement (OERI), U.S. Department of Education, under contract number RP91002009. The content does not necessarily reflect the views of OERI, the Department, or any other agency of the U.S. Government.

BEST COPY AVAILABLE

## ACKNOWLEDGMENTS

The *1997 Educational Needs Assessment Report for the Pacific Region* would not have been possible without the contributions, dedication, collaboration, and enthusiastic support of many people throughout the Pacific region. The authors of this document would like to acknowledge the work of participants and thank them for investing a great deal of effort in this study.

## TABLE OF CONTENTS

|                                                   |    |
|---------------------------------------------------|----|
| TABLE OF CONTENTS .....                           | 2  |
| EXECUTIVE SUMMARY .....                           | 5  |
| METHODOLOGY .....                                 | 8  |
| ANALYSIS RESULTS AND FINDINGS .....               | 13 |
| AMERICAN SAMOA .....                              | 13 |
| CHUUK STATE .....                                 | 19 |
| COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS..... | 25 |
| GUAM .....                                        | 31 |
| HAWAI'I.....                                      | 37 |
| KOSRAE STATE .....                                | 43 |
| REPUBLIC OF THE MARSHALL ISLANDS.....             | 49 |
| REPUBLIC OF PALAU .....                           | 55 |
| POHNPEI STATE .....                               | 61 |
| THE PACIFIC REGION AS A WHOLE .....               | 67 |
| APPENDIX.....                                     | 78 |

## TABLES

|                                                                                                      |    |
|------------------------------------------------------------------------------------------------------|----|
| TABLE 1. LIST OF TEN ORIGINAL ROLES REGROUPED INTO FIVE NEW ROLES OF RESPONDENTS .....               | 10 |
| TABLE 2. LIST OF 47 ORIGINAL EDUCATIONAL NEED ITEMS REGROUPED INTO NINE NEED AREAS .....             | 10 |
| TABLE 2 (CONTINUED). LIST OF 47 ORIGINAL EDUCATIONAL NEED ITEMS REGROUPED INTO NINE NEED AREAS ..... | 11 |
| TABLE 2 (CONTINUED). LIST OF 47 ORIGINAL EDUCATIONAL NEED ITEMS REGROUPED INTO NINE NEED AREAS ..... | 12 |
| TABLE 3. MEAN RATINGS OF THE IMPORTANCE OF NINE NEED AREAS IN AMERICAN SAMOA .....                   | 15 |
| TABLE 4. MEAN RATINGS OF PROGRESS IN AMERICAN SAMOA .....                                            | 16 |
| TABLE 5. MAGNITUDE OF PERCEIVED NEED IN AMERICAN SAMOA .....                                         | 17 |
| TABLE 6. MEAN RATINGS OF THE IMPORTANCE OF NINE NEED AREAS IN CHUUK STATE, FSM .....                 | 21 |
| TABLE 7. MEAN RATINGS OF PROGRESS IN CHUUK STATE, FSM .....                                          | 22 |
| TABLE 8. MAGNITUDE OF PERCEIVED NEED IN CHUUK STATE, FSM .....                                       | 23 |
| TABLE 9. MEAN RATINGS OF THE IMPORTANCE OF NINE NEED AREAS IN THE CNMI .....                         | 27 |
| TABLE 10. MEAN RATINGS OF PROGRESS IN THE CNMI .....                                                 | 28 |
| TABLE 11. MAGNITUDE OF PERCEIVED NEED IN THE CNMI .....                                              | 29 |
| TABLE 12. MEAN RATINGS OF THE IMPORTANCE OF NINE NEED AREAS IN GUAM .....                            | 33 |
| TABLE 13. MEAN RATINGS OF PROGRESS IN GUAM .....                                                     | 34 |
| TABLE 14. MAGNITUDE OF PERCEIVED NEED IN GUAM .....                                                  | 35 |
| TABLE 15. MEAN RATINGS OF THE IMPORTANCE OF NINE NEED AREAS IN HAWAI'I .....                         | 39 |
| TABLE 16. MEAN RATINGS OF PROGRESS IN HAWAI'I .....                                                  | 40 |
| TABLE 17. MAGNITUDE OF PERCEIVED NEED IN HAWAI'I .....                                               | 41 |
| TABLE 18. MEAN RATINGS OF THE IMPORTANCE OF NINE NEED AREAS IN KOSRAE STATE, FSM .....               | 45 |
| TABLE 19. MEAN RATINGS OF PROGRESS IN KOSRAE STATE, FSM .....                                        | 46 |
| TABLE 20. MAGNITUDE OF PERCEIVED NEED IN KOSRAE STATE, FSM .....                                     | 47 |
| TABLE 21. MEAN RATINGS OF THE IMPORTANCE OF NINE NEED AREAS IN THE RMI .....                         | 51 |
| TABLE 22. MEAN RATINGS OF PROGRESS IN THE RMI .....                                                  | 52 |
| TABLE 23. MAGNITUDE OF PERCEIVED NEED IN THE RMI .....                                               | 53 |
| TABLE 24. MEAN RATINGS OF THE IMPORTANCE OF NINE NEED AREAS IN THE REPUBLIC OF PALAU .....           | 57 |
| TABLE 25. MEAN RATINGS OF PROGRESS IN THE REPUBLIC OF PALAU .....                                    | 58 |
| TABLE 26. MEAN RATINGS OF PERCEIVED NEED IN THE REPUBLIC OF PALAU .....                              | 59 |
| TABLE 27. MEAN RATINGS OF THE IMPORTANCE OF NINE NEED AREAS IN POHNPEI STATE, FSM .....              | 63 |
| TABLE 28. MEAN RATINGS OF PROGRESS IN POHNPEI STATE, FSM .....                                       | 64 |
| TABLE 29. MAGNITUDE OF PERCEIVED NEED IN POHNPEI STATE, FSM .....                                    | 65 |
| TABLE 30. MEAN RATINGS OF THE IMPORTANCE OF NINE NEED AREAS IN THE PACIFIC REGION .....              | 70 |
| TABLE 31. MEAN RATINGS OF PROGRESS IN THE PACIFIC REGION .....                                       | 71 |
| TABLE 32. MAGNITUDE OF PERCEIVED NEED IN THE PACIFIC REGION .....                                    | 72 |
| TABLE 33. FREQUENCY OF RANKINGS OF IMPORTANCE IN NINE NEED AREAS IN THE PACIFIC REGION .....         | 73 |
| TABLE 34. FREQUENCY OF RANKINGS OF PROGRESS IN NINE NEED AREAS IN THE PACIFIC REGION .....           | 74 |
| TABLE 35. FREQUENCY OF RANKINGS OF NEED IN NINE NEED AREAS IN THE PACIFIC REGION .....               | 75 |
| TABLE 36. RESULTS OF ONE-WAY ANOVA FOR THE AREA OF LANGUAGE AND CULTURAL DIVERSITY .....             | 77 |

## FIGURES

|                                                                                               |    |
|-----------------------------------------------------------------------------------------------|----|
| FIGURE 1. SAMPLE DISTRIBUTION AMONG ROLE GROUPS IN AMERICAN SAMOA .....                       | 14 |
| FIGURE 2. SAMPLE DISTRIBUTION AMONG ROLE GROUPS IN CHUUK STATE, FSM .....                     | 20 |
| FIGURE 3. SAMPLE DISTRIBUTION AMONG ROLE GROUPS IN THE CNMI .....                             | 26 |
| FIGURE 4. SAMPLE DISTRIBUTION AMONG ROLE GROUPS IN GUAM .....                                 | 32 |
| FIGURE 5. SAMPLE DISTRIBUTION AMONG ROLE GROUPS IN HAWAI'I .....                              | 38 |
| FIGURE 6. SAMPLE DISTRIBUTION AMONG ROLE GROUPS IN KOSRAE STATE, FSM .....                    | 44 |
| FIGURE 7. SAMPLE DISTRIBUTION AMONG ROLE GROUPS IN THE REPUBLIC OF THE MARSHALL ISLANDS ..... | 50 |
| FIGURE 8. SAMPLE DISTRIBUTION AMONG ROLE GROUPS IN THE REPUBLIC OF PALAU .....                | 56 |

|                                                                                          |    |
|------------------------------------------------------------------------------------------|----|
| FIGURE 9. SAMPLE DISTRIBUTION AMONG ROLE GROUPS IN POHNPEI STATE, FSM .....              | 62 |
| FIGURE 10. SAMPLE DISTRIBUTION AMONG ENTITIES IN THE PACIFIC REGION .....                | 68 |
| FIGURE 11. SAMPLE DISTRIBUTION AMONG EDUCATIONAL ROLE GROUPS IN THE PACIFIC REGION ..... | 69 |

## EXECUTIVE SUMMARY

The *1997 Educational Needs Assessment Report for the Pacific Region* is one of the services provided by Pacific Resources for Education and Learning (PREL) as required by PREL's contract with the U.S. Department of Education's Office of Educational Research and Development (OERI). It is part of a continuing update by PREL on educational needs assessment in the Pacific region. The entities that PREL serves are American Samoa, the Commonwealth of the Northern Mariana Islands, the Federated States of Micronesia—Chuuk, Kosrae, Pohnpei, and Yap, Guam, Hawai'i, the Republic of the Marshall Islands, and the Republic of Palau. To provide appropriate, effective, and efficient services to this diverse region, PREL's Board of Directors has included in its bylaws the continuing task of "determining the priority needs and problems of member agencies and educational consumers of the region." Regional needs identification is an integral part of effective program planning at PREL.

A "discrepancy" model was selected for this study. In this model, a *need* is defined as "the discrepancy or gap between desired performance and observed performance." Larger gaps indicate greater needs. To assess educational needs in the Pacific region, PREL identified nine general educational areas to be examined through 47 survey items. These 47 items were presented as a questionnaire to educators throughout the region (see Appendix). On a seven-point scale, they were asked to rate the **perceived importance** and the perceived amount of **progress** for each survey item. The gap between the ratings for perceived importance and perceived progress was regarded as a measure of the perceived magnitude of educational **needs** in the Pacific region.

Because of great distances and limited accessibility between entities, data collection required much effort. Data were collected between January 1997 and November 1997. The data were collected by PREL's Research and Development (R&D) Cadre members and also by PREL staff who visited entities in the region. Seven hundred and thirty-six participants from ten entities responded to the survey. The respondents included classroom teachers, teacher aides, resource teachers, students, district/central office specialists, district/central administrators, parents, principals/assistant principals, college/university faculty, and community leaders. For the purpose of this analysis, respondents were reorganized into five role groups: teachers, students, principals, administrators, and community members. Teachers were the largest sample group for the region (54.6 percent of the 736 respondents). There were not enough responses (9) from Yap State to generate an entity level report.

In addition to the survey, information was also collected from sources such as PREL's Board of Directors, the Pacific Curriculum and Instruction Council (PCIC), the Pacific Mathematics and Science Regional Consortium, and PREL's R&D Cadre.

The survey indicated that although there were some differences among the nine entities, there were several areas of agreement:

- Systemic reform, professional development, and at-risk and gifted/talented youth were identified as the three most important areas for education in the Pacific region.
- Planning and accountability, curriculum and instruction, and systemic reform were the three areas in which the most progress was perceived.
- Use of technology, early childhood education, and at-risk and gifted/talented youth were generally identified as the three areas of most need.

In addition to these findings, the following issues were perceived as critical areas that require immediate attention:

- Curriculum reform and standards development.
- Long-term plans and strategies for professional development of teachers, principals, and central office administrators.
- Increased funding for all educational services.

These findings are consistent among the entities. Perhaps further analyses of needs by entity are warranted. The consideration of historical and current political information about each entity (i.e., degree of American affiliation) may provide more insights about each entity's educational needs than the current analysis can.

As with any study, this one had its limitations. One possibility for bias was the high proportion (402 out of 736) of respondents who are educational practitioners at the classroom level. As a result, the interests and perceived needs of classroom teachers might be disproportionately represented. However, general findings concerning perceived importance of and progress in each need area were consistent among the different role groups. Therefore, the findings in this report are considered legitimate for the Pacific region as a whole.

## INTRODUCTION

The *1997 Educational Needs Assessment Report for the Pacific Region* is part of a continuing update on educational needs assessment, conducted by Pacific Resources for Education and Learning (PREL). To provide appropriate, effective, and efficient services to this diverse region, PREL's Board of Directors has included in its bylaws the continuing task of "determining the priority needs and problems of member agencies and educational consumers of the region." Regional needs identification is an integral part of effective program planning at PREL.

The entities served by PREL are the following: American Samoa, the Commonwealth of the Northern Mariana Islands, the Federated States of Micronesia—Chuuk, Kosrae, Pohnpei, and Yap, Guam, Hawai'i, the Republic of the Marshall Islands, and the Republic of Palau. Knowledge of the geographic, demographic, cultural, and educational context of the Pacific region is critical in order to properly understanding its diversity and its special educational needs. Each of these contexts is briefly discussed in the following sections.

### Geographic Context

The Pacific region is geographically large, culturally complex, and not commonly understood outside the region. The school systems that PREL assists are spread across 4.9 million square miles of ocean, islands, and atolls.

Beyond Hawai'i, island communities are served by only one airline. The six time zones in the region allow only four overlapping work days between entities on different sides of the International Dateline. Great distances and limited accessibility are factors that affect every aspect of education in the Pacific region.

### Cultural Context

Perhaps the greatest challenges to education in the Pacific region result from the many cultural and linguistic differences. There are at least nine major Pacific cultures in the region and numerous subcultures. The language of instruction, English, is not the first language of the home for many students in the region.

Many Pacific people still live by fishing and farming on isolated atolls. Others work in complex international economic systems with close ties to the United States, Japan, and other Pacific Rim nations. Many of PREL's entities are transitioning from subsistence to cash economies.

The Pacific region is home to approximately 1.6 million people. Its diversity of cultures, languages, economies, and political statuses is both a challenge and a strength when working with educators, schools, and communities. Cultural diversity is increased by

large immigrant populations from other Pacific islands, Asia, and beyond. Some classrooms contain mostly students who are native to the area; others are highly multilingual and multicultural.

### **Educational Context**

In the Pacific, school facilities range from modern, well-equipped buildings to wooden platforms with thatched roofs and no electricity. A Pacific "teacher" can be a high school graduate or a Ph.D. A "curriculum" might be a few shared copies of an outdated text or a comprehensive set of books and materials. An "educational policy" may be a common understanding or a legal code.

In 1993, the yearly educational expenditure per pupil in the Pacific region ranged from \$584 to \$4,311 (PREL, 1993). The average family income in some entities is so low that children do not attend school because of their families' inability to provide crayons, pencils, or paper. Textbooks and worksheets are often shared by several children. Details about educational contexts will be addressed in each entity's section.

## **METHODOLOGY**

As might be expected, the educational needs of the Pacific region vary greatly. They range from the need for basic facilities, sanitation, health, books, materials, and teachers to the need to address issues such as at-risk students, effective cultural learning styles, governance systems, culturally-based curricula, professional development, and challenges for the 21st century.

Assessing needs in this diverse geographic, cultural, and educational context requires knowledge of the region, close working relationships with constituents, and varied techniques for identifying educational needs.

The *Regional Needs Assessment* questionnaire used to collect data (see Appendix) was developed by PREL staff, based on historical regional needs; this list of needs was reaffirmed and revised by PREL's Board of Directors. The 47 identified needs were grouped into the following nine need areas:

- Planning and Accountability
- Curriculum and Instruction
- Language and Cultural Diversity
- Community/Parent Involvement
- Early Childhood Education
- At-Risk and Gifted/Talented Youth
- Professional Development
- Systemic Reform
- Use of Technology

On a seven-point scale, respondents were asked to rate the level of importance of each need in their respective jurisdiction and the progress made toward meeting the need. In addition, each respondent was asked to identify and rank the three most important educational needs in their jurisdiction.

Respondents were also asked to provide information concerning their entity, their respective role in education, and their history of participation in PREL's *Regional Needs Assessment*.

### Data Collection

Data were collected from 736 respondents between January 1997 and November 1997. No systematic sampling method was used for this study. The data were collected by the R&D Cadre members from each entity and by PREL staff who traveled to the entities to perform other tasks (e.g., workshop presentations). Because of large distances and limited access to some areas in the region, the data collection process demanded a great deal of effort. The respondents included classroom teachers, teacher aides, resource teachers, students, district/central office specialists, district/central administrators, parents, principals/assistant principals, college/university faculty, and community leaders. For the purposes of this analysis, respondents were reorganized into five role groups: teachers, students, principals, administrators, and community members.

### Analysis

Data were entered into a database and analyzed using the SPSS for Windows statistical tool. The original variables in the data set were as follows:

**ENTITY:** American Samoa, the Commonwealth of the Northern Mariana Islands (CNMI), the Federated States of Micronesia (Chuuk, Kosrae, Pohnpei, Yap), Guam, Hawai'i, the Republic of the Marshall Islands (RMI), and Republic of Palau.

**ROLE GROUP:** Classroom teacher, Teacher aide, Resource teacher, Student, Central/district office specialist, Parent, Principal/Vice principal, Central/district office administrator, Higher education faculty member, Other.

**IMPORTANCE:** The respondents were asked to rate the 47 items of identified need in terms of perceived importance.

**PROGRESS:** The respondents were asked to rate the 47 items of identified need in terms of perceived progress.

**NEED:** This variable was determined by subtracting the **PROGRESS** rating from the **IMPORTANCE** rating for each of the 47 items. The variable represents the magnitude of perceived need in each educational area.

For simplification of analysis, the ten educational roles were reorganized into five new role groups: Administrators, Principals, Teachers, Students, and Community members. The redistribution is shown in Table 1.

**Table 1. List of Ten Original Roles Regrouped into Five New Roles of Respondents**

| Original Role                                                                   | New Role         |
|---------------------------------------------------------------------------------|------------------|
| Central/district office administrator<br>Central/district office specialist     | Administrator    |
| Parent and Other                                                                | Community member |
| Principal/vice principal                                                        | Principal        |
| Student                                                                         | Student          |
| Classroom teacher, Teacher aide, Resource teacher, and Higher education faculty | Teacher          |

For the purposes of this analysis, the 47 identified educational need items were reorganized into nine general need areas, as shown in Table 2.

**Table 2. List of 47 Original Educational Need Items Regrouped into Nine Need Areas**

| Need Area                   | Item                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Planning and Accountability | <ol style="list-style-type: none"> <li>1. Obtain information about curriculum, instruction, policy development, research and evaluation.</li> <li>2. Make better use of information for planning, policy development, and decision making.</li> <li>3. Improve the organization and management of the school(s).</li> <li>4. Determine regional and local education system needs.</li> <li>5. Construct and/or remodel school facilities.</li> <li>6. Assure sufficient and equitable funding for all schools.</li> </ol> |
| Curriculum and Instruction  | <ol style="list-style-type: none"> <li>7. Improve student learning in basic skills.</li> <li>8. Develop culturally appropriate curricula.</li> <li>9. Provide appropriate curricula to meet economic and community needs.</li> <li>10. Develop the Pacific region content and performance standards and curriculum frameworks.</li> <li>11. Improve current assessment practices in schools.</li> </ol>                                                                                                                   |

BEST COPY AVAILABLE

Table 2 (continued). List of 47 Original Educational Need Items Regrouped into Nine Need Areas

| Need Area                         | Item                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Language and Cultural Diversity   | <ul style="list-style-type: none"> <li>12. Enhance the implementation of language policies in the schools.</li> <li>13. Improve student learning of English (fluency and literacy).</li> <li>14. Improve student learning of indigenous languages (fluency and literacy).</li> <li>15. Improve cultural literacy in the indigenous cultures.</li> <li>16. Promote multiculturalism and multilingualism.</li> <li>17. Develop printed subject matter materials in indigenous languages.</li> <li>18. Develop printed subject matter materials in English.</li> <li>19. Develop standardized tests in indigenous languages.</li> <li>20. Develop standardized tests in English.</li> </ul> |
| Community Parent Involvement      | <ul style="list-style-type: none"> <li>21. Identify community determined educational outcomes.</li> <li>22. Develop and maintain effective school partnerships with businesses, community agencies, and organizations.</li> <li>23. Make sure the school meets the needs of the community.</li> <li>24. Involve the community in meeting the needs of the school.</li> <li>25. Involve parents in the school improvement process.</li> </ul>                                                                                                                                                                                                                                             |
| Early Childhood Education         | <ul style="list-style-type: none"> <li>26. Develop early childhood programs in public schools to serve children ages 4-5 and their parents.</li> <li>27. Expand and improve child care services.</li> <li>28. Develop programs for parents of young children to improve their parenting skills.</li> <li>29. Improve staff quality and ensure comprehensive services to preschool children and their families.</li> </ul>                                                                                                                                                                                                                                                                |
| At-Risk and Gifted/Talented Youth | <ul style="list-style-type: none"> <li>30. Develop policies to provide services to at-risk youth.</li> <li>31. Develop programs to help students understand the risks of drugs, alcohol, and tobacco.</li> <li>32. Develop career program offerings.</li> <li>33. Meet individual needs of students who are at-risk of school failure.</li> <li>34. Meet individual needs of the gifted and talented students.</li> </ul>                                                                                                                                                                                                                                                                |

Table 2 (continued). List of 47 Original Educational Need Items Regrouped into Nine Need Areas

| Need Area                       | Item                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Professional Development        | <ul style="list-style-type: none"> <li>35. Provide professional development in effective school leadership to principals and other administrators.</li> <li>36. Provide professional development in effective curriculum and instruction for teachers.</li> <li>37. Provide professional development in the content areas for teachers.</li> <li>38. Provide professional development in assessment and test design for testing and evaluation personnel.</li> <li>39. Provide professional development for educational specialists.</li> <li>40. Strengthen participation of institutions of higher education in professional development of public education personnel (i.e., administrators, principals, teachers, specialists).</li> </ul> |
| Systemic Reform                 | <ul style="list-style-type: none"> <li>41. Involve teachers in the school improvement process.</li> <li>42. Involve teachers in setting standards (i.e., curriculum standards, performance standards, teacher standards, etc.).</li> <li>43. Involve communities in the school improvement process.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Uses of Technology in Education | <ul style="list-style-type: none"> <li>44. Examine/identify the potential role of modern technology in the instructional process.</li> <li>45. Use modern technology (especially Computer Assisted Instruction) at the classroom level.</li> <li>46. Increase use of electronic means for information gathering, retrieval, and sharing to keep up with the latest promising practices in education.</li> <li>47. Involve educators in electronic networking to share resources and enhance their professional development.</li> </ul>                                                                                                                                                                                                         |

The perceived importance, perceived progress, and magnitude of need for each of the nine educational areas is analyzed by entity. A summary of needs for the entire Pacific region (all results) is presented after the entity analyses.

BEST COPY AVAILABLE

## ANALYSIS RESULTS AND FINDINGS

### AMERICAN SAMOA

American Samoa is located in the mid South Pacific, 2,600 miles from Honolulu. It covers a total area of 76 square miles and is home to 54,089 people (est. 1995). American Samoa is an unincorporated territory of the United States, and its citizens are U.S. nationals. As such, its citizens are free to enter the United States. An estimated 65,000 Samoans have migrated to the West Coast and some 20,000 live in Hawai'i.

Approximately 50 percent of the population in American Samoa is under 16 years of age. The American Samoa public education system consists of 23 elementary (K-12) and six high schools (9-12). There are also nine private elementary schools and three private high schools. American Samoa has a public, two-year community college that offers various disciplines such as business, clerical, vocational, and nursing.

The labor force in American Samoa consists of approximately 10,000 workers and represents roughly 30 percent of the total population. The government is the largest employer, absorbing about 50 percent of the total labor force. The American Samoa Department of Education is the largest in the executive branch, employing nearly 30 percent of the total government labor force.

Figure 1. Sample Distribution Among Role Groups in American Samoa

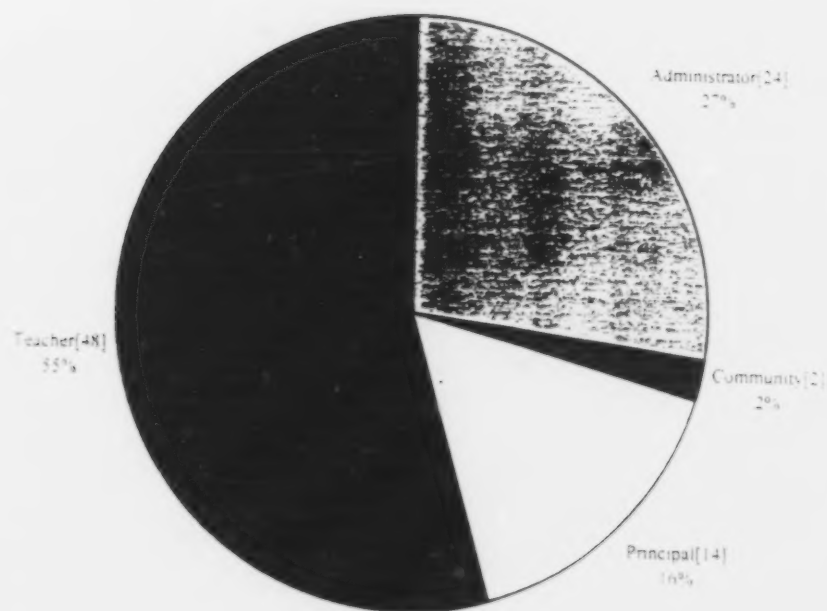


Figure 1 shows there were eighty eight participants from American Samoa.

BEST COPY AVAILABLE

### Mean Ratings of the Importance of Nine Educational Need Areas

On a seven-point scale, respondents rated the importance of 47 different educational issues (1 indicates *none* and 7 indicates *very much*). The 47 responses were recompiled into nine need areas. Table 3 presents the mean ratings in American Samoa, from highest to lowest, of the perceived importance of each educational area.

Table 3. Mean Ratings of the Importance of Nine Need Areas in American Samoa

| Need Area                         | Importance |
|-----------------------------------|------------|
| Systemic Reform                   | 6.58       |
| Professional Development          | 6.53       |
| Use of Technology                 | 6.49       |
| At-Risk and Gifted/Talented Youth | 6.48       |
| Curriculum and Instruction        | 6.40       |
| Community/Parent Involvement      | 6.35       |
| Early Childhood Education         | 6.34       |
| Planning and Accountability       | 6.33       |
| Language and Cultural Diversity   | 6.08       |

As shown in Table 3, *systemic reform*, *professional development*, and *use of technology* are perceived as the three most important educational areas in American Samoa. *Early childhood education*, *planning and accountability*, and *language and cultural diversity* are the areas of lowest perceived importance. All of the mean ratings are greater than 6.0, and the difference between the lowest and highest ratings is only 0.5.

### Mean Ratings of Progress in Nine Educational Need Areas

On a seven-point scale, respondents rated the progress on 47 different educational issues (1 indicates *none* and 7 indicates *very much*). The 47 responses were recompiled into nine need areas. Table 4 presents the mean ratings in American Samoa, from highest to lowest, of the perceived progress in each educational area.

Table 4. Mean Ratings of Progress in American Samoa

| Need Area                         | Progress |
|-----------------------------------|----------|
| Curriculum and Instruction        | 4.16     |
| Professional Development          | 4.10     |
| Planning and Accountability       | 4.09     |
| Language and Cultural Diversity   | 4.00     |
| Early Childhood Education         | 3.95     |
| At-Risk and Gifted/Talented Youth | 3.90     |
| Systemic Reform                   | 3.82     |
| Community/Parent Involvement      | 3.67     |
| Use of Technology                 | 3.48     |

As shown in Table 4, *curriculum and instruction*, *professional development*, and *planning and accountability* are the areas that respondents believe show the most progress. *Systemic reform*, *community/parent involvement*, and *use of technology* are the areas of the least perceived progress. In contrast to the high rating of the importance, the ratings of progress for all needs areas are below 4.2, just above the midpoint of the rating scale.

### Magnitude of Perceived Need in Nine Educational Need Areas

As stated, respondents rated the perceived importance and the perceived progress in 47 different educational issues on a seven-point scale (1 indicates *none* and 7 indicates *very much*). For each issue, a rating of magnitude of need was calculated by subtracting the rating of progress from the rating of importance. The 47 ratings were then recompiled into nine need areas. Table 5 presents the results from highest to lowest, on the magnitude of need in American Samoa in each educational area.

Table 5. Magnitude of Perceived Need in American Samoa

| Need Area                         | Need |
|-----------------------------------|------|
| Use of Technology                 | 3.04 |
| Systemic Reform                   | 2.76 |
| Community/Parent Involvement      | 2.70 |
| At-Risk and Gifted/Talented Youth | 2.64 |
| Professional Development          | 2.46 |
| Early Childhood Education         | 2.44 |
| Curriculum and Instruction        | 2.25 |
| Planning and Accountability       | 2.24 |
| Language and Cultural Diversity   | 2.15 |

As shown in Table 5, *use of technology*, *systemic reform*, and *community/parent involvement* are identified as the three educational areas that have the greatest needs in American Samoa. *Curriculum and instruction*, *planning and accountability*, and *language and cultural diversity* are perceived as the areas with the lowest amount of need.

The difference between the most and least need is 0.89. Eight out of the nine need areas in Table 5 are below 3.0.

### **Other Educational Needs**

PREL hosted a meeting of the Pacific Curriculum and Instruction Council (PCIC) in Honolulu, October 1997. In this meeting, educational leaders from the Pacific region identified the following issues as critical educational needs in American Samoa:

- Develop a set of standards in alignment with instructional programs.
- Increase the English language proficiency of students.
- Develop and present professional and relevant curriculum inservice training.

## CHUUK STATE

Federated States Of Micronesia

There are four states in the Federated States of Micronesia (FSM): Chuuk, Kosrae, Pohnpei, and Yap. The entities were formerly part of the United Nations Trust Territory of the Pacific Islands. The FSM is now a semi-independent nation under a compact of free association with the United States. It receives financial benefits in return for exclusive free passage of U.S. military vessels. The FSM compact will be up for renewal in the year 2001.

Chuuk State comprises the volcanic island in the Chuuk Lagoon and some 24 outer-island atolls--in all more than 290 islands. Chuuk is the most populous of the FSM states, with 50,514 people (est. 1995) and an area of 44.8 square miles. Its economy is derived from fishing, agriculture, and a small tourist trade.

Figure 2. Sample Distribution Among Role Groups in Chuuk State, FSM

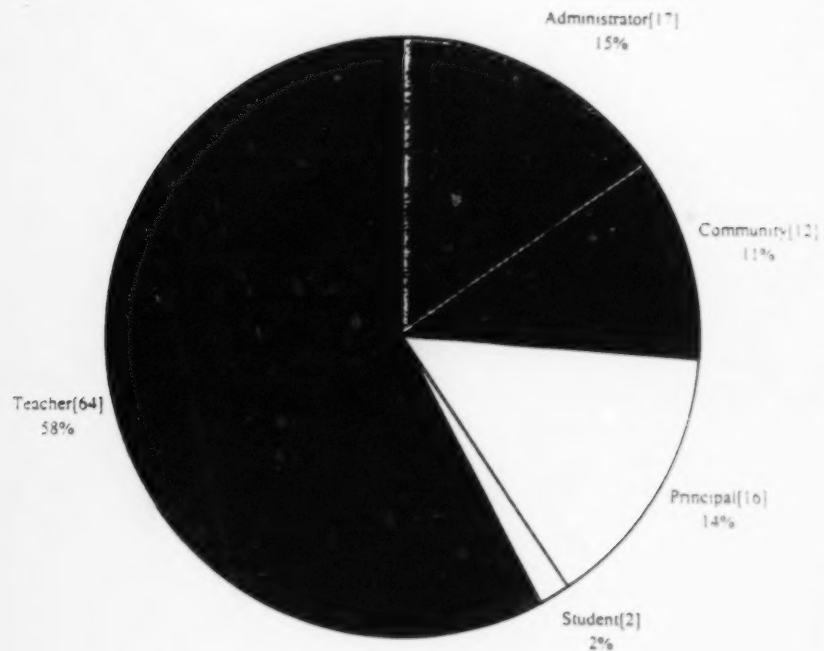


Figure 2 shows there were one hundred and eleven participants from Chuuk State, FSM.

BEST COPY AVAILABLE

### Mean Ratings of the Importance of Nine Educational Need Areas

On a seven-point scale, respondents rated the importance of 47 different educational issues (1 indicates *none* and 7 indicates *very much*). The 47 responses were recompiled into nine need areas. Table 6 presents the mean ratings in Chuuk State, from highest to lowest, of the perceived importance of each educational area.

Table 6. Mean Ratings of the Importance of Nine Need Areas in Chuuk State, FSM

| Need Area                         | Importance |
|-----------------------------------|------------|
| Systemic Reform                   | 6.23       |
| Professional Development          | 6.22       |
| Curriculum and Instruction        | 6.21       |
| Planning and Accountability       | 6.18       |
| Community/Parent Involvement      | 6.09       |
| Early Childhood Education         | 6.08       |
| At-Risk and Gifted/Talented Youth | 6.07       |
| Language and Cultural Diversity   | 6.05       |
| Use of Technology                 | 6.04       |

Table 6 indicates that *systemic reform*, *professional development*, and *curriculum and instruction* are perceived as the most important educational issues in Chuuk. *At-risk and gifted/ talented youth*, *language and cultural diversity*, and *use of technology* are the issues identified as least important. However, the difference between the lowest rating and the highest rating is only 0.19, and all mean ratings are above 6.0, signifying high levels of importance in all nine need areas.

### Mean Ratings of Progress in Nine Educational Need Areas

On a seven-point scale, respondents rated the progress on 47 different educational issues (1 indicates *none* and 7 indicates *very much*). The 47 responses were recompiled into nine need areas. Table 7 presents the mean ratings in Chuuk State, from highest to lowest, of the perceived progress in each educational area.

Table 7. Mean Ratings of Progress in Chuuk State, FSM

| Need Area                         | Progress |
|-----------------------------------|----------|
| Planning and Accountability       | 4.09     |
| Curriculum and Instruction        | 4.03     |
| Professional Development          | 3.82     |
| Systemic Reform                   | 3.73     |
| Community/Parent Involvement      | 3.68     |
| Language and Cultural Diversity   | 3.64     |
| At-Risk and Gifted/Talented Youth | 3.45     |
| Early Childhood Education         | 3.37     |
| Use of Technology                 | 3.20     |

As shown in Table 7, *planning and accountability*, *curriculum and instruction*, and *professional development* are the areas that respondents believe show the most progress. *At-risk and gifted/talented youth*, *early childhood education*, and *use of technology* are the areas of least perceived progress. However, all nine educational areas were rated below 4.10, signifying an average to low level of perceived progress.

### Magnitude of Perceived Need in Nine Educational Need Areas

As stated, respondents rated the perceived importance and the perceived progress in 47 different educational issues on a seven-point scale (1 indicates *none* and 7 indicates *very much*). For each issue, a rating of magnitude of need was calculated by subtracting the rating of progress from the rating of importance. The 47 ratings were then recompiled into nine need areas. Table 8 presents the results from highest to lowest, on the magnitude of need in Chuuk in each educational area.

Table 8. Magnitude of Perceived Need in Chuuk State, FSM

| Need Area                         | Need |
|-----------------------------------|------|
| Use of Technology                 | 2.92 |
| Early Childhood Education         | 2.82 |
| At-Risk and Gifted/Talented Youth | 2.68 |
| Systemic Reform                   | 2.54 |
| Community/Parent Involvement      | 2.52 |
| Language and Cultural Diversity   | 2.48 |
| Professional Development          | 2.46 |
| Curriculum and Instruction        | 2.21 |
| Planning and Accountability       | 2.11 |

As shown in Table 8, *use of technology*, *early childhood education*, and *at-risk and gifted/talented youth* are perceived as the three educational areas with the greatest need. *Professional development*, *curriculum and instruction*, and *planning and accountability* are perceived as the areas with the lowest amount of need in Chuuk State, FSM.

The difference between the most and least need is 0.81. All of the nine needs in Table 8 are below 3.0.

### **Other Educational Needs**

PREL hosted a meeting of the Pacific Curriculum and Instruction Council (PCIC) in Honolulu, October 1997. In this meeting, educational leaders from the Pacific region identified the following issues as critical educational needs in Chuuk State:

- Development of curriculum standards.
- Funding for implementation of School/Community-Based Management and other school activities.
- Increased training of teachers and principals.
- School personnel restructuring to balance school staffing.
- Continuing collaboration with community on school improvement programs.

## COMMONWEALTH OF THE NORTHERN MARIANA ISLANDS

The Commonwealth of the Northern Mariana Islands (CNMI) forms a chain of 17 volcanic islands stretching over 375 miles north and south, with a land area of 181 square miles. There are six inhabited islands, but most of the Commonwealth's 78,753 people (est. 1995) live on Saipan. The CNMI was formerly a part of the United Nations Trust Territory of the Pacific Islands; however, in the 1970s, its people chose to become a commonwealth, associated with the United States. Therefore, the CNMI is permanently a part of the United States, and its people are U.S. citizens. Tourism is a major and growing industry, drawing thousands of Asians to the islands annually. Manufacturing is also a growing industry in the CNMI.

Figure 3. Sample Distribution Among Role Groups in the CNMI

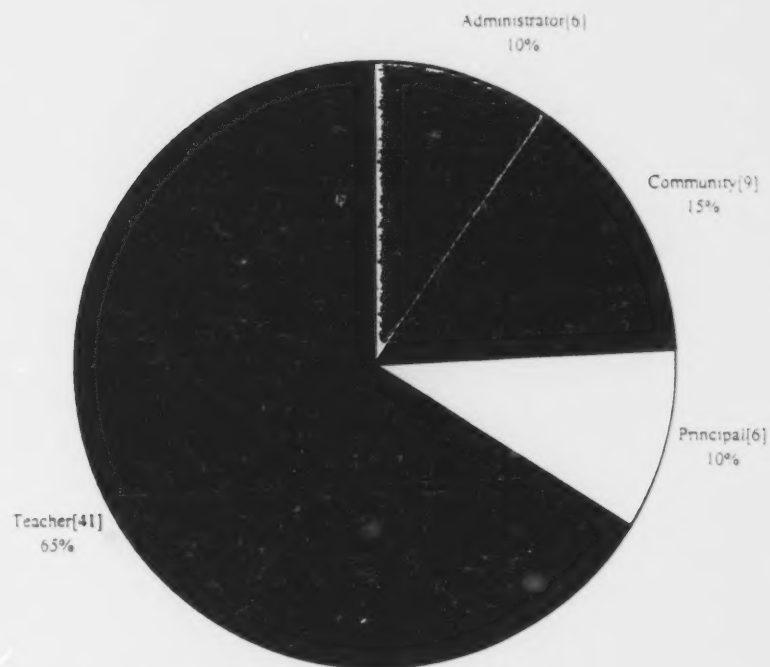


Figure 3 shows there were sixty two participants from Commonwealth of the Northern Mariana Islands.

BEST COPY AVAILABLE

### Mean Ratings of the Importance of Nine Educational Need Areas

On a seven-point scale, respondents rated the importance of 47 different educational issues (1 indicates *none* and 7 indicates *very much*). The 47 responses were recompiled into nine need areas. Table 9 presents the mean ratings in the Commonwealth of the Northern Mariana Islands, from highest to lowest, of the perceived importance of each educational area.

Table 9. Mean Ratings of the Importance in Nine Need Areas in the CNMI

| Need Area                         | Importance |
|-----------------------------------|------------|
| Systemic Reform                   | 6.39       |
| At-Risk and Gifted/Talented Youth | 6.31       |
| Early Childhood Education         | 6.28       |
| Use of Technology                 | 6.27       |
| Community/Parent Involvement      | 6.26       |
| Professional Development          | 6.23       |
| Curriculum and Instruction        | 6.16       |
| Language and Cultural Diversity   | 6.08       |
| Planning and Accountability       | 6.02       |

The data in Table 9 indicate that *systemic reform*, *at-risk and gifted/talented youth*, *early childhood education*, and *use of technology* are perceived as the most important educational issues in the CNMI. *Curriculum and instruction*, *language and cultural diversity*, and *planning and accountability* are perceived as the issues of lowest importance. However, the difference between the lowest rating and the highest rating is only 0.37, and all of the ratings of importance are above 6.0, revealing a high level of importance for all nine areas.

### Mean Ratings of Progress in Nine Educational Need Areas

On a seven-point scale, respondents rated the progress on 47 different educational issues (1 indicates *none* and 7 indicates *very much*). The 47 responses were recompiled into nine need areas. Table 10 presents the mean ratings in the CNMI, from highest to lowest, of the perceived progress in each educational area.

Table 10. Mean Ratings of Progress in the CNMI

| Need Area                         | Progress |
|-----------------------------------|----------|
| Systemic Reform                   | 5.00     |
| Language and Cultural Diversity   | 4.53     |
| Planning and Accountability       | 4.46     |
| Early Childhood Education         | 4.45     |
| Professional Development          | 4.44     |
| Curriculum and Instruction        | 4.43     |
| Community/Parent Involvement      | 4.42     |
| At-Risk and Gifted/Talented Youth | 4.37     |
| Use of Technology                 | 4.33     |

As shown in Table 10, the areas of *systemic reform*, *language and cultural diversity*, and *planning and accountability* are perceived as the areas showing the most progress in the CNMI. *Community/parent involvement*, *at-risk and gifted/talented youth*, and *use of technology* are the educational areas identified as showing the least amount of progress. All of ratings are above 4.30, which is above the midpoint of the rating scale.

### Magnitude of Perceived Need in Nine Educational Need Areas

As stated, respondents rated the perceived importance and the perceived progress in 47 different educational issues on a seven-point scale (1 indicates *none* and 7 indicates *very much*). For each issue, a rating of magnitude of need was calculated by subtracting the rating of progress from the rating of importance. The 47 ratings were then recompiled into nine need areas. Table 11 presents the results from highest to lowest, on the magnitude of need in the CNMI in each educational area.

Table 11. Magnitude of Perceived Need in the CNMI

| Need Area                         | Need |
|-----------------------------------|------|
| Use of Technology                 | 2.00 |
| At-Risk and Gifted/Talented Youth | 1.97 |
| Early Childhood Education         | 1.94 |
| Community/Parent Involvement      | 1.89 |
| Curriculum and Instruction        | 1.82 |
| Professional Development          | 1.79 |
| Language and Cultural Diversity   | 1.64 |
| Planning and Accountability       | 1.61 |
| Systemic Reform                   | 1.48 |

As shown in Table 11, *use of technology*, *at-risk and gifted/talented youth*, and *early childhood education* are identified as the three educational areas with the greatest amount of need in the CNMI. *Language and cultural diversity*, *planning and accountability*, and *systemic reform* are perceived as the areas with the lowest amount of need.

The difference between the most and least need is 0.52. All of the nine needs in Table 11 are equal to or less than 2.0.

### **Other Educational Needs**

During the meeting of the Pacific Curriculum and Instruction Council (PCIC) in Honolulu, October 1997, educational leaders from the Pacific region identified the following issues as critical needs in the CNMI:

- Refine and develop current standards, benchmarks, and sample activities for core subjects.
- Revitalize bilingual and cultural programs.
- Integrate technology into core classroom curriculum.
- Recruit and develop more local teachers. It was reported that 80 percent of the teachers in the CNMI are from the U.S. Mainland and Guam.

## GUAM

Guam is the largest of the Micronesian Islands with a land area of 212 square miles and a population of 144,694 (est. 1995). Formed by the union of two volcanoes, northern Guam is a flat limestone plateau and the southern regions are mountainous. Guam's population is ethnically diverse. It is comprised of residents from throughout Asia and the Pacific as well as a substantial number of U.S. military personnel and their dependents. As an unincorporated territory of the United States, Guam's people hold U.S. citizenship and are free to immigrate to the United States. Tourism, especially from Japan and other Asian countries, is the major private industry. Guam has a strong economy and the labor market attracts many immigrants from the Philippines and other Micronesian entities.

Figure 4. Sample Distribution Among Role Groups in Guam

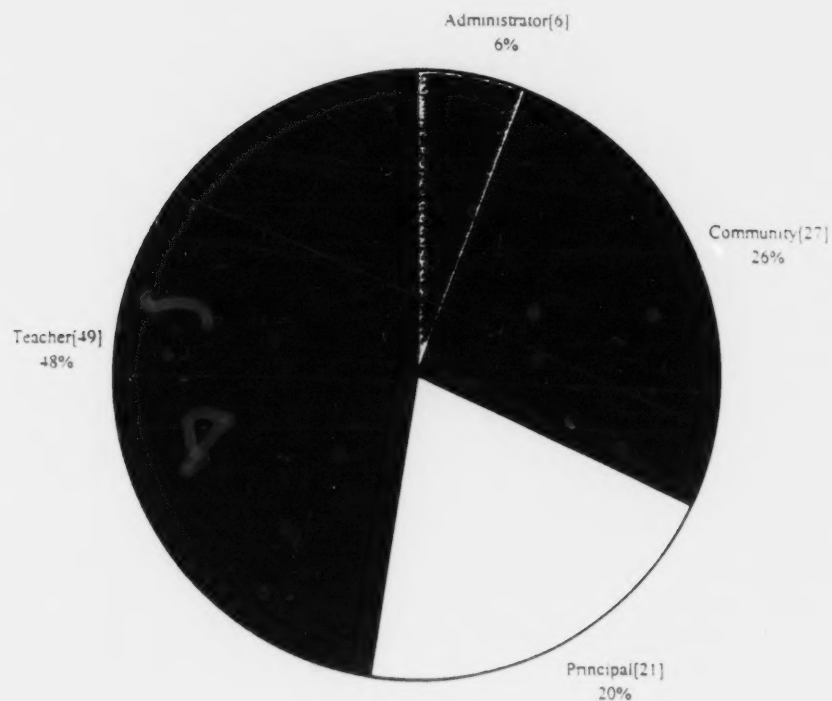


Figure 4 shows there were one hundred and three participants from Guam.

BEST COPY AVAILABLE

### Mean Ratings of the Importance of Nine Educational Need Areas

On a seven-point scale, respondents rated the importance of 47 different educational issues (1 indicates *none* and 7 indicates *very much*). The 47 responses were recompiled into nine need areas. Table 12 presents the mean ratings in Guam, from highest to lowest, of the perceived importance of each educational area.

Table 12. Mean Ratings of the Importance of Nine Need Areas in Guam

| Need Area                         | Importance |
|-----------------------------------|------------|
| Systemic Reform                   | 6.48       |
| Professional Development          | 6.42       |
| At-Risk and Gifted/Talented Youth | 6.37       |
| Use of Technology                 | 6.29       |
| Community/Parent Involvement      | 6.28       |
| Planning and Accountability       | 6.21       |
| Curriculum and Instruction        | 6.20       |
| Early Childhood Education         | 6.11       |
| Language and Cultural Diversity   | 5.58       |

As show in Table 12, *systemic reform*, *professional development*, and *at-risk and gifted/talented youth* are perceived as the educational areas of most importance in Guam. *Curriculum and instruction*, *early childhood education*, and *language and cultural diversity* are perceived as the least important. However, eight out of nine need areas are higher than 6.0, indicating a high level of importance for all areas.

### Mean Ratings of Progress in Nine Educational Need Areas

On a seven-point scale, respondents rated the progress on 47 different educational issues (1 indicates *none* and 7 indicates *very much*). The 47 responses were recompiled into nine need areas. Table 13 presents the mean ratings in Guam, from highest to lowest, of the perceived progress in each educational area.

Table 13. Mean Ratings of Progress in Guam

| Need Area                         | Progress |
|-----------------------------------|----------|
| Professional Development          | 3.95     |
| Systemic Reform                   | 3.94     |
| Planning and Accountability       | 3.84     |
| At-Risk and Gifted/Talented Youth | 3.82     |
| Curriculum and Instruction        | 3.76     |
| Language and Cultural Diversity   | 3.59     |
| Community/Parent Involvement      | 3.58     |
| Early Childhood Education         | 3.33     |
| Use of Technology                 | 3.00     |

As shown in Table 13, respondents perceive the areas of *professional development*, *systemic reform*, and *planning and accountability* as showing the most progress in Guam. *Community/parent involvement*, *early childhood education*, and *use of technology* are identified as the areas of least progress in the nine need areas. However, all of ratings for nine need areas are below 4.0, indicating a perception of average progress in all areas.

### Magnitude of Perceived Need in Nine Educational Need Areas

As stated, respondents rated the perceived importance and the perceived progress in 47 different educational issues on a seven-point scale (1 indicates *none* and 7 indicates *very much*). For each issue, a rating of magnitude of need was calculated by subtracting the rating of progress from the rating of importance. The 47 ratings were then recompiled into nine need areas. Table 14 presents the results from highest to lowest, on the magnitude of need in Guam in each educational area.

Table 14. Magnitude of Perceived Need in Guam

| Need Area                         | Need |
|-----------------------------------|------|
| Use of Technology                 | 3.32 |
| Early Childhood Education         | 2.75 |
| Community/Parent Involvement      | 2.71 |
| At-Risk and Gifted/Talented Youth | 2.54 |
| Systemic Reform                   | 2.53 |
| Professional Development          | 2.51 |
| Curriculum and Instruction        | 2.45 |
| Planning and Accountability       | 2.30 |
| Language and Cultural Diversity   | 2.13 |

As shown in Table 14, *use of technology*, *early childhood education*, and *community/parent involvement* are identified as the three educational areas of greatest perceived need in Guam. *Curriculum and instruction*, *planning and accountability*, and *language and cultural diversity* are indicated as the areas of least perceived need.

The difference between highest- and lowest-rated need is 1.19. Eight out of nine need areas in Table 14 are below 3.0.

### **Other Educational Needs**

During the October 1997 meeting of the Pacific Curriculum and Instruction Council in Honolulu, educational leaders from Guam indicated that the following issues were of immediate concern:

- Need to ensure that teachers are capable and are given inservice assistance to meet the needs of the children.
- Train teachers to use technology and explore other subject areas.
- Improve school accountability systems.
- Increase funding for educational reform.
- Establish career development standards for students.

## HAWAI'I

With 1,148,430 people (est. 1995), Hawai'i is the largest and most populous jurisdiction in PREL's region. These volcanic islands are 2,400 miles from the U.S. West Coast and are the center of Pacific trade, commerce, and industry. Hawai'i's school-age population is ethnically diverse with four prominent cultures making up the majority of the school population: Native Hawaiian and Part-Hawaiian, Filipino, Japanese, and Caucasian. Numerous other cultures are represented, including other Pacific islanders. It is not unusual if many different languages are spoken by members of a school community.

Figure 5. Sample Distribution Among Role Groups in Hawai'i



Figure 5 shows there were seventy seven participants from Hawai'i.

BEST COPY AVAILABLE

### Mean Ratings of the Importance of Nine Educational Need Areas

On a seven-point scale, respondents rated the importance of 47 different educational issues (1 indicates *none* and 7 indicates *very much*). The 47 responses were recompiled into nine need areas. Table 15 presents the mean ratings in Hawai'i, from highest to lowest, of the perceived importance of each educational area.

Table 15. Mean Ratings of the Importance of Nine Need Areas in Hawai'i

| Need Area                         | Importance |
|-----------------------------------|------------|
| Systemic Reform                   | 6.35       |
| At-Risk and Gifted/Talented Youth | 6.25       |
| Use of Technology                 | 6.03       |
| Professional Development          | 6.02       |
| Community/Parent Involvement      | 6.01       |
| Planning and Accountability       | 5.95       |
| Early Childhood Education         | 5.76       |
| Curriculum and Instruction        | 5.75       |
| Language and Cultural Diversity   | 5.00       |

As shown in Table 15, respondents identified *systemic reform*, *at-risk and talented youth*, and *use of technology* as the most important educational need areas in Hawai'i. *Early childhood education*, *curriculum and instruction*, and *language and cultural diversity* are perceived as the areas of least importance.

### Mean Ratings of Progress in Nine Educational Need Areas

On a seven-point scale, respondents rated the progress on 47 different educational issues (1 indicates *none* and 7 indicates *very much*). The 47 responses were recompiled into nine need areas. Table 16 presents the mean ratings in Hawai'i, from highest to lowest, of the perceived progress in each educational area.

Table 16. Mean Ratings of Progress in Hawai'i

| Need Area                         | Progress |
|-----------------------------------|----------|
| Systemic Reform                   | 4.48     |
| At-Risk and Gifted/Talented Youth | 4.26     |
| Professional Development          | 4.05     |
| Community/Parent Involvement      | 4.04     |
| Curriculum and Instruction        | 3.99     |
| Use of Technology                 | 3.88     |
| Planning and Accountability       | 3.83     |
| Language and Cultural Diversity   | 3.51     |
| Early Childhood Education         | 3.37     |

As shown in Table 16, *systemic reform*, *at-risk and gifted/talented youth*, and *professional development* are the educational areas that respondents believe show the most progress in Hawai'i. *Planning and accountability*, *language and cultural diversity*, and *early childhood education* are the areas identified as showing the least amount of progress. The difference between the lowest and highest rating is 1.11.

### Magnitude of Perceived Need in Nine Educational Need Areas

As stated, respondents rated the perceived importance and the perceived progress in 47 different educational issues on a seven-point scale (1 indicates *none* and 7 indicates *very much*). For each issue, a rating of magnitude of need was calculated by subtracting the rating of progress from the rating of importance. The 47 ratings were then recompiled into nine need areas. Table 17 presents the results from highest to lowest, on the magnitude of need in each educational area in Hawai'i.

Table 17. Magnitude of Perceived Need in Hawai'i

| Need Area                         | Need |
|-----------------------------------|------|
| Early Childhood Education         | 2.40 |
| Use of Technology                 | 2.14 |
| Planning and Accountability       | 2.13 |
| At-Risk and Gifted/Talented Youth | 2.00 |
| Professional Development          | 1.99 |
| Community/Parent Involvement      | 1.97 |
| Systemic Reform                   | 1.87 |
| Curriculum and Instruction        | 1.76 |
| Language and Cultural Diversity   | 1.47 |

As shown in Table 17, *early childhood education*, *use of technology*, and *planning and accountability* are the three educational areas of greatest perceived need in the State of Hawai'i. *Systemic reform*, *curriculum and instruction*, and *language and cultural diversity* are identified as the areas of least need.

The difference between ratings of the greatest and least needs is 0.93. All of the nine needs in Table 17 are below 3.0. This outcome is reflected in the majority of responses.

### Other Educational Needs

As a result of the high cost of living in Hawai'i, it is estimated by Hawai'i Kids Count (1995) that 60 percent of children under school age have both of their parents or a single parent in the labor force. In addition, numerous studies have demonstrated that quality preschool experience helps prepare children for school and also helps them succeed. However, in 1993, only 61 percent of eligible four-year-olds attended one of the state's three subsidized preschool programs (Head Start, Open Doors, and the Kamehameha Schools' Center-based Preschools). Preschool accessibility is a continuing need in Hawai'i. The findings in Table 17 enhance this theme.

The development of computer skills and skills to access alternative information systems are increasingly regarded as basic elements of job readiness and quality education. More and more, schools are considering computer literacy as an essential element in the curriculum and are providing opportunities for students to access computer or alternative information systems; this is especially useful for students who do not have a computer at home. However, approximately 70 percent of the schools in Hawai'i lack sufficient technological elements; e.g., telephone lines, modems, and computers, according to the Government Accounting Office, 1995. There is an obvious need to upgrade computer/technology access. The findings in Table 17 also revealed this theme.

During a meeting of curriculum chiefs from the Pacific region in October 1997, representatives from Hawai'i indicated that the following issues were of immediate concern:

- Continue to implement the Comprehensive Student Support System.
- Focus on leadership building to meet the challenge of education reform.
- Establish a better assessment and evaluation system.

## KOSRAE STATE

Federated States of Micronesia

Kosrae State consists of one volcanic island covering 42.1 square miles with a wet tropical climate and many rivers and waterfalls. Kosrae has a population of 7,688 people (est. 1995); a majority of its residents live in a rural environment with a subsistence economy.

Kosrae has eight public schools with a total of 2,546 students and 164 teachers (PREL, 1995).

Figure 6. Sample Distribution Among Role Groups in Kosrae State, FSM

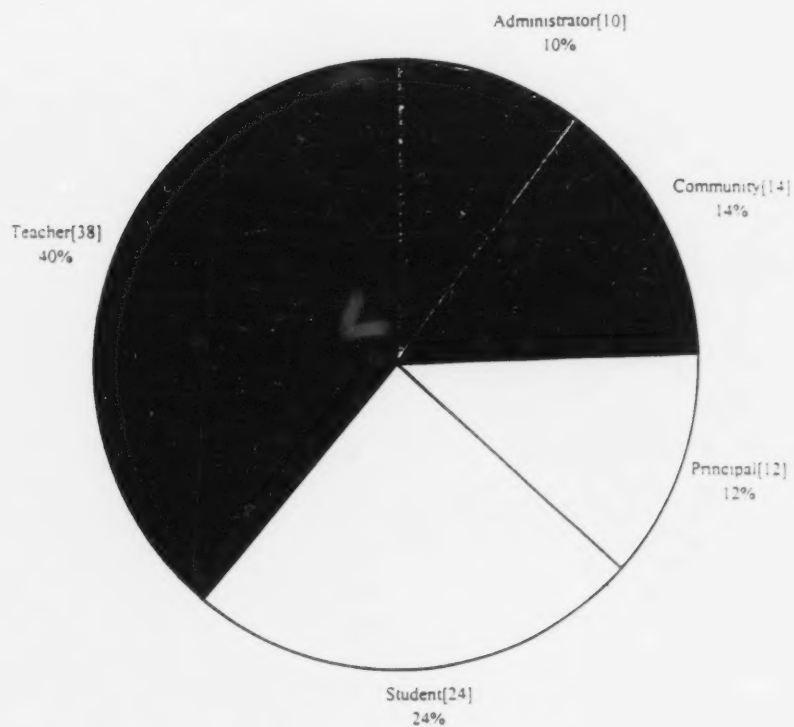


Figure 6 shows there were ninety eight participants from Kosrae State, FSM.

### Mean Ratings of the Importance of Nine Educational Need Areas

On a seven-point scale, respondents rated the importance of 47 different educational issues (1 indicates *none* and 7 indicates *very much*). The 47 responses were recompiled into nine need areas. Table 18 presents the mean ratings in Kosrae, from highest to lowest, of the perceived importance of each educational area.

Table 18. Mean Ratings of the Importance of Nine Need Areas in Kosrae State, FSM

| Need Area                         | Importance |
|-----------------------------------|------------|
| Systemic Reform                   | 6.22       |
| At-Risk and Gifted/Talented Youth | 6.21       |
| Professional Development          | 6.20       |
| Curriculum and Instruction        | 6.16       |
| Community/Parent Involvement      | 6.13       |
| Planning and Accountability       | 6.11       |
| Early Childhood Education         | 5.92       |
| Use of Technology                 | 5.91       |
| Language and Cultural Diversity   | 5.87       |

As shown in Table 18, *systemic reform*, *at-risk and gifted/talented youth*, and *professional development* are identified as the three most important educational need areas in Kosrae State, FSM. *Early childhood education*, *use of technology*, and *language and cultural diversity* are identified as the least important. However, all areas received a rating greater than 5.8, indicating high importance for all nine areas.

### Mean Ratings of Progress in Nine Educational Need Areas

On a seven-point scale, respondents rated the progress on 47 different educational issues (1 indicates *none* and 7 indicates *very much*). The 47 responses were recompiled into nine need areas. Table 19 presents the mean ratings in Kosrae, from highest to lowest, of the perceived progress in each educational area.

Table 19. Mean Ratings of Progress in Kosrae State, FSM

| Need Area                         | Progress |
|-----------------------------------|----------|
| Curriculum and Instruction        | 4.18     |
| Planning and Accountability       | 4.16     |
| Language and Cultural Diversity   | 4.09     |
| Community/Parent Involvement      | 3.86     |
| Systemic Reform                   | 3.75     |
| Early Childhood Education         | 3.68     |
| Professional Development          | 3.67     |
| At-Risk and Gifted/Talented Youth | 3.30     |
| Use of Technology                 | 3.10     |

As shown in Table 19, respondents identified *curriculum and instruction*, *planning and accountability*, *language and cultural diversity* as the educational areas with the most perceived progress in Kosrae State, FSM. *Professional development*, *at-risk and gifted/talented youth*, and *use of technology* are identified as the areas of least progress.

### Magnitude of Perceived Need in Nine Educational Need Areas

As stated, respondents rated the perceived importance and the perceived progress in 47 different educational issues on a seven-point scale (1 indicates *none* and 7 indicates *very much*). For each issue, a rating of magnitude of need was calculated by subtracting the rating of progress from the rating of importance. The 47 ratings were then recompiled into nine need areas. Table 20 presents the results from highest to lowest, on the magnitude of need in each educational area in Kosrae.

Table 20. Magnitude of Perceived Need in Kosrae State, FSM

| Need Area                         | Need |
|-----------------------------------|------|
| At-Risk and Gifted/Talented Youth | 3.06 |
| Use of Technology                 | 3.00 |
| Professional Development          | 2.59 |
| Systemic Reform                   | 2.56 |
| Early Childhood Education         | 2.38 |
| Community/Parent Involvement      | 2.37 |
| Curriculum and Instruction        | 2.06 |
| Planning and Accountability       | 2.02 |
| Language and Cultural Diversity   | 1.77 |

Table 20 indicates the *at-risk, gifted, and talented youth, use of technology, and professional development* are the three educational areas of greatest perceived need in Kosrae State, FSM. *Curriculum and instruction, planning and accountability, and language and cultural diversity* are the areas of least perceived need.

The difference between most and least need is 1.29. Seven out of nine needs in Table 20 are below 3.0.

### **Other Educational Needs**

During the Pacific Curriculum and Instruction Council meeting in Honolulu in October 1997, Kosrae delegates stated that there were too many needs to list. The most critical needs are as follows:

- Provide basic materials for students and teachers
- Provide professional development for teachers
- Reform the educational system

## REPUBLIC OF THE MARSHALL ISLANDS

The Republic of the Marshall Islands (RMI) consists of two chains of 29 coral atolls and five low islands stretching several hundred miles north to south. The islands have a total land area of 70 square miles and a population of 53,665 (est. 1995). The RMI, formerly a part of the United Nations Trust Territory of the Pacific Islands, has entered into a compact of free association with the United States, which provides economic support to the Republic. The U.S. space-tracking station on Kwajalein Island also contributes to the economy. Agriculture and marine development are important economic initiatives in the RMI.

Figure 7. Sample Distribution Among Role Groups in the Republic of the Marshall Islands

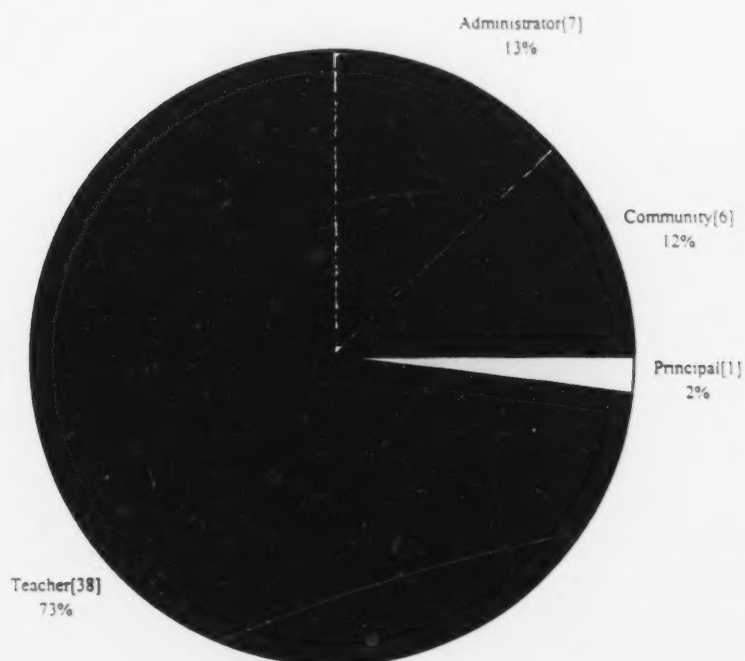


Figure 7 shows there were fifty two participants from the Republic of the Marshall Islands.

BEST COPY AVAILABLE

### Mean Ratings of the Importance of Nine Educational Need Areas

On a seven-point scale, respondents rated the importance of 47 different educational issues (1 indicates *none* and 7 indicates *very much*). The 47 responses were recompiled into nine need areas. Table 21 presents the mean ratings in the Republic of the Marshall Islands (RMI), from highest to lowest, of the perceived importance of each educational area.

Table 21. Mean Ratings of the Importance of Nine Need Areas in the RMI

| Need Area                         | Importance |
|-----------------------------------|------------|
| Systemic Reform                   | 6.34       |
| Curriculum and Instruction        | 6.26       |
| Planning and Accountability       | 6.22       |
| Professional Development          | 6.09       |
| At-Risk and Gifted/Talented Youth | 6.05       |
| Use of Technology                 | 5.98       |
| Early Childhood Education         | 5.95       |
| Community/Parent Involvement      | 5.94       |
| Language and Cultural Diversity   | 5.79       |

As shown in Table 21, *systemic reform*, *curriculum and instruction*, and *planning and accountability* are perceived as the three most important educational areas in the RMI. *Early childhood education* and *community/parent involvement* are identified as the least important areas. However, all nine need areas received a rating of 5.79 or greater, indicating a high level of importance for all.

### Mean Ratings of Progress in Nine Educational Need Areas

On a seven-point scale, respondents rated the progress on 47 different educational issues (1 indicates *none* and 7 indicates *very much*). The 47 responses were recompiled into nine need areas. Table 22 presents the mean ratings in the Republic of the Marshall Islands, from highest to lowest, of the perceived progress in each educational area.

Table 22. Mean Ratings of Progress in the RMI

| Need Area                         | Progress |
|-----------------------------------|----------|
| Professional Development          | 4.23     |
| Curriculum and Instruction        | 4.22     |
| Planning and Accountability       | 3.95     |
| Systemic Reform                   | 3.93     |
| Language and Cultural Diversity   | 3.85     |
| Community/Parent Involvement      | 3.53     |
| Early Childhood Education         | 3.51     |
| At-Risk and Gifted/Talented Youth | 3.47     |
| Use of Technology                 | 3.23     |

As shown in Table 22, the educational areas of *professional development*, *curriculum and instruction*, and *planning and accountability* are perceived as the areas of most progress in the RMI. *Early childhood education*, *at-risk and gifted/talented youth*, and *use of technology* are the areas that indicate the least amount of perceived progress.

### Magnitude of Perceived Need in Nine Educational Need Areas

As stated, respondents rated the perceived importance and the perceived progress in 47 different educational issues on a seven-point scale (1 indicates *none* and 7 indicates *very much*). For each issue, a rating of magnitude of need was calculated by subtracting the rating of progress from the rating of importance. The 47 ratings were then recompiled into nine need areas. Table 23 presents the results, from highest to lowest, on the magnitude of need in each educational area in the Republic of the Marshall Islands.

Table 23. Magnitude of Perceived Need in the RMI

| Need Area                         | Need |
|-----------------------------------|------|
| Use of Technology                 | 2.70 |
| Systemic Reform                   | 2.54 |
| At-Risk and Gifted/Talented Youth | 2.52 |
| Community/Parent Involvement      | 2.46 |
| Early Childhood Education         | 2.42 |
| Planning and Accountability       | 2.28 |
| Curriculum and Instruction        | 2.04 |
| Language and Cultural Diversity   | 1.96 |
| Professional Development          | 1.87 |

As shown in Table 23, the educational areas of *use of technology*, *systemic reform*, and *at-risk, gifted and talented youth* are identified as the three areas of greatest perceived need in the RMI. *Curriculum and instruction*, *language and cultural diversity*, and *professional development* are indicated as the least needed.

All ratings of nine need areas are below 3.0.

### **Other Educational Needs**

Delegates from the RMI attended the meeting of the Pacific Curriculum and Instruction Council in Honolulu, October 1997. These educational leaders discussed the educational needs of the RMI and identified the following areas as needs of highest priority:

- Upgrade professional development programs for teachers.
- Downsize the government.
- Develop a policy for moving administration out to classroom.

## REPUBLIC OF PALAU

The Republic of Palau is the westernmost jurisdiction in Micronesia and is less than 500 miles from the Philippines. It consists of several hundred volcanic islands and a few coral atolls; however, its population of 16,304 (est. 1995) inhabit only eight islands. The land area is 177 square miles. The Republic of Palau recently negotiated a compact of free association with the U.S. government, which discontinued all former trust territory relationships. The primary economic strengths in Palau include marine resources, agriculture, tourism, and funds from the compact association. Although not fully developed at this time, tourism has blossomed in recent years.

Figure 8. Sample Distribution Among Role Groups in the Republic of Palau

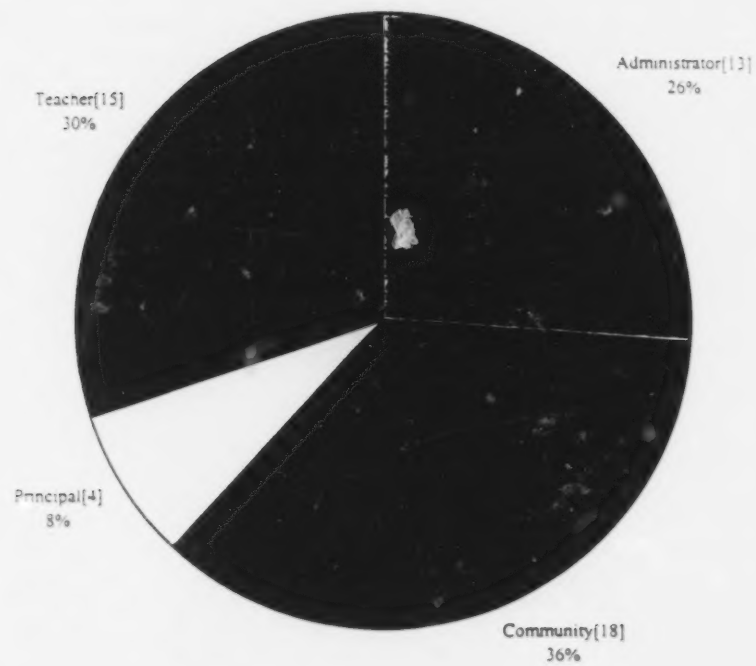


Figure 8 shows there were fifty participants from the Republic of Palau.

### Mean Ratings of the Importance of Nine Educational Need Areas

On a seven-point scale, respondents rated the importance of 47 different educational issues (1 indicates *none* and 7 indicates *very much*). The 47 responses were recompiled into nine need areas. Table 24 presents the mean ratings in the Republic of Palau, from highest to lowest, of the perceived importance of each educational area.

Table 24. Mean Ratings of the Importance of Nine Need Areas in the Republic of Palau

| Need Area                         | Importance |
|-----------------------------------|------------|
| Curriculum and Instruction        | 6.54       |
| Professional Development          | 6.53       |
| Systemic Reform                   | 6.51       |
| Community/Parent Involvement      | 6.49       |
| At-Risk and Gifted/Talented Youth | 6.48       |
| Use of Technology                 | 6.45       |
| Planning and Accountability       | 6.22       |
| Language and Cultural Diversity   | 6.14       |
| Early Childhood Education         | 6.00       |

In shown in Table 24, *curriculum and instruction*, *professional development*, and *systemic reform* are the educational areas perceived to be the most important in the Republic of Palau. All ratings are equal to or greater than 6.0, indicating a high level of importance in all nine of the educational need areas.

### Mean Ratings of Progress in Nine Educational Need Areas

On a seven-point scale, respondents rated the progress on 47 different educational issues (1 indicates *none* and 7 indicates *very much*). The 47 responses were recompiled into nine need areas: Table 25 presents the mean ratings in the Republic of Palau, from highest to lowest, of the perceived progress in each educational area.

Table 25. Mean Ratings of Progress in the Republic of Palau

| Need Area                         | Progress |
|-----------------------------------|----------|
| Curriculum and Instruction        | 4.13     |
| Planning and Accountability       | 4.08     |
| Language and Cultural Diversity   | 4.07     |
| Systemic Reform                   | 4.03     |
| Community/Parent Involvement      | 3.98     |
| Professional Development          | 3.96     |
| Use of Technology                 | 3.89     |
| At-Risk and Gifted/Talented Youth | 3.59     |
| Early Childhood Education         | 3.22     |

As shown in Table 25, the educational areas of *curriculum and instruction*, *planning and accountability*, and *language and cultural diversity* indicate the areas of most perceived progress in the Republic of Palau. *Use of technology*, *at-risk and gifted/talented youth*, and *early childhood education* are the areas of the least perceived progress.

### Magnitude of Perceived Need in Nine Educational Need Areas

As stated, respondents rated the perceived importance and the perceived progress in 47 different educational issues on a seven-point scale (1 indicates *none* and 7 indicates *very much*). For each issue, a rating of magnitude of need was calculated by subtracting the rating of progress from the rating of importance. The 47 ratings were then recompiled into nine need areas. Table 26 presents the results, from highest to lowest, on the magnitude of need in each educational area in the Republic of Palau.

Table 26. Mean Ratings of Perceived Need in the Republic of Palau

| Need Area                         | Need |
|-----------------------------------|------|
| At-Risk and Gifted/Talented Youth | 2.89 |
| Early Childhood Education         | 2.77 |
| Professional Development          | 2.63 |
| Use of Technology                 | 2.60 |
| Systemic Reform                   | 2.51 |
| Community/Parent Involvement      | 2.50 |
| Curriculum and Instruction        | 2.41 |
| Planning and Accountability       | 2.14 |
| Language and Cultural Diversity   | 2.10 |

As shown in Table 26, *at-risk and gifted/talented youth*, *early childhood education*, and *professional development* are the three educational areas perceived as having the greatest need in the Republic of Palau. *Curriculum and instruction*, *planning and accountability*, and *language and cultural diversity* are areas perceived as having the lowest need.

The difference between most and least need is 0.79. All of the ratings for nine need areas in Table 26 are below 3.0.

### **Other Educational Needs**

During the Pacific Curriculum and Instruction Council meeting in Honolulu, October 1997, delegates from the Republic of Palau indicated that the following areas are of high priority:

- Get more people involved in the process of implementation of Palau 2000, the master plan for educational improvement in the Republic of Palau.
- Get more funding for the implementation of Palau 2000.
- Get education personnel to shift their paradigm toward reform.
- Push the Board of Education to be in functioning role.

## POHNPEI STATE

### Federated States of Micronesia

Pohnpei State consists of one large volcanic island and six inhabited atolls with most of its 133 square miles on Pohnpei Island. The population of the state is 34,480 (est. 1995). Pohnpei State is the national capitol of the Federated States of Micronesia and the site of the College of Micronesia-FSM. Pohnpei is a beautiful and fertile island with much local agriculture and a growing tourist industry. It also has an international reputation for its gourmet peppers.

Figure 9. Sample Distribution Among Role Groups in Pohnpei State, FSM

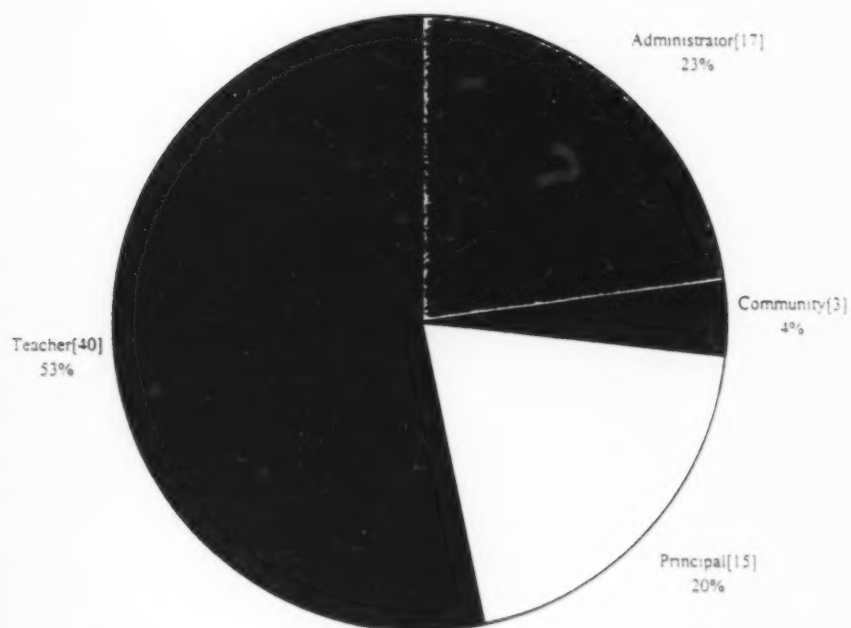


Figure 9 shows there were seventy five participants from Pohnpei State.

BEST COPY AVAILABLE

### Mean Ratings of the Importance of Nine Educational Need Areas

On a seven-point scale, respondents rated the importance of 47 different educational issues (1 indicates *none* and 7 indicates *very much*). The 47 responses were recompiled into nine need areas. Table 27 presents the mean ratings in Pohnpei, from highest to lowest, of the perceived importance of each educational area.

**Table 27. Mean Ratings of the Importance in Nine Need Areas in Pohnpei State, FSM**

| Need Area                         | Importance |
|-----------------------------------|------------|
| At-Risk and Gifted/Talented Youth | 6.37       |
| Systemic Reform                   | 6.35       |
| Community/Parent Involvement      | 6.34       |
| Professional Development          | 6.34       |
| Curriculum and Instruction        | 6.23       |
| Planning and Accountability       | 6.19       |
| Early Childhood Education         | 6.18       |
| Language and Cultural Diversity   | 6.14       |
| Use of Technology                 | 5.95       |

As shown in Table 27, *at-risk and gifted/talented youth*, *systemic reform*, and *community/parent involvement* are perceived as the educational need areas of most importance in Pohnpei State. Eight of the nine ratings for need areas are greater than 6.0, indicating a high level of importance for all areas.

### Mean Ratings of Progress in Nine Educational Need Areas

On a seven-point scale, respondents rated the progress in 47 different educational issues (1 indicates *none* and 7 indicates *very much*). The 47 responses were recompiled into nine need areas. Table 28 presents the mean ratings in Pohnpei, from highest to lowest, of the perceived progress in each educational area.

Table 28. Mean Ratings of Progress in Pohnpei State, FSM

| Need Area                         | Progress |
|-----------------------------------|----------|
| Curriculum and Instruction        | 3.89     |
| Systemic Reform                   | 3.82     |
| Planning and Accountability       | 3.76     |
| Professional Development          | 3.73     |
| Language and Cultural Diversity   | 3.63     |
| At-Risk and Gifted/Talented Youth | 3.60     |
| Community/Parent Involvement      | 3.52     |
| Early Childhood Education         | 2.92     |
| Use of Technology                 | 2.47     |

As shown in Table 28, *curriculum and instruction*, *systemic reform*, and *planning and accountability* are the educational areas perceived as showing the most progress in Pohnpei State. *Community/parent involvement*, *early childhood education*, and *use of technology* are the areas where the least progress was indicated. In contrast to the high ratings of importance, the ratings of progress for all need areas are below 4.0, which is just above the midpoint of the rating scale.

### Magnitude of Perceived Need in Nine Educational Need Areas

As stated, respondents rated the perceived importance and the perceived progress in 47 different educational issues on a seven-point scale (1 indicates *none* and 7 indicates *very much*). For each issue, a rating of magnitude of need was calculated by subtracting the rating of progress from the rating of importance. The 47 ratings were then recompiled into nine need areas. Table 29 presents, from highest to lowest, the results from Pohnpei on the magnitude of need in each educational area.

Table 29. Magnitude of Perceived Need in Pohnpei State, FSM

| Need Area                         | Need |
|-----------------------------------|------|
| Use of Technology                 | 3.49 |
| Early Childhood Education         | 3.37 |
| At-Risk and Gifted/Talented Youth | 2.87 |
| Community/Parent Involvement      | 2.82 |
| Professional Development          | 2.64 |
| Language and Cultural Diversity   | 2.58 |
| Planning and Accountability       | 2.50 |
| Systemic Reform                   | 2.49 |
| Curriculum and Instruction        | 2.46 |

As shown in Table 29, *use of technology*, *early childhood education*, and *at-risk and gifted/talented youth* are identified as the three educational areas in most need in Pohnpei State, FSM. *Planning and accountability*, *systemic reform*, and *curriculum and instruction* are perceived to be the areas of least need.

The difference between the greatest and least need rating is 1.03. Seven out of nine needs in Table 29 are below 3.0.

Table 29 also indicates that *use of technology* and *early childhood education* are educational areas of relatively larger need than the others.

### Other Educational Needs

Through participation in the meeting of the Pacific Curriculum and Instruction Council in Honolulu, October 1997, Pohnpei delegates indicated that the following areas are priorities in their entity:

- Continue to develop instructional materials in local indigenous languages.
- Obtain funding for printing locally-developed materials.
- Professional development training for principals and teachers should focus on improving students' outcomes.

## THE PACIFIC REGION AS A WHOLE

The Pacific region served by PREL includes ten governance jurisdictions including American Samoa, Chuuk State, Commonwealth of the Northern Mariana Islands, Guam, Hawai'i, Kosrae State, Republic of the Marshall Islands, Republic of Palau, Pohnpei State, and Yap State. Distance, accessibility, and diversity are the hallmarks of the Pacific. The region encompasses a distance of 4.9 million square miles and includes six time zones plus the international dateline. A round-trip flight to Washington, D.C. from Palau, the most distant entity, requires 40 hours of seat time. The Pacific region is populated by 1.6 million people; as a result, it is very linguistically and culturally diverse. There are more than ten distinct cultures; English is a second language for most of the population. Much of the region is undergoing a shift from subsistence to cash economies, and migration from rural, outlying areas to urban centers is increasing. Both of these phenomena are creating economic and cultural strains that affect all aspects of the life.

Schools range from very modern, well-equipped facilities to wooden platforms with thatched roofs and no electricity. Approximately 30 percent of the elementary schools in the region are located in remote, outer islands and atolls, and 75 percent of school-age children attend small, rural schools. More than 200 schools have no electricity or running water. Sixty percent of the children fit the common parameters of youngsters who are at risk of failure. The region is in a development phase with increasing emphasis placed on industrialization and tourism. However, the economic resources of most entities are insufficient to provide quality educational services to all children and youth. For example, per pupil expenditures in the Pacific region in 1993 ranged from \$584 to \$4,311.

The educational needs of the Pacific region reflect the diversity of the region: They are extremely varied and wide-ranging. Needs include concerns about basic school facilities and infrastructure, sanitation, health, lack of instructional materials, teacher training and development, at-risk youth, curriculum, standards, cultural learning styles, and governance systems. As the region becomes more and more Westernized, a wide range of socio-economic-cultural issues has also been affecting education.

Assessing the educational needs in such a diverse context requires knowledge of the region, close working relationships with constituents, and varied culturally sensitive techniques for identifying critical needs.

PREL has been actively collecting the data in order to get a more accurate picture of this diverse region. The results present in this report including the most current education Needs Assessment Survey (1997) and the update summary of the Pacific Curriculum Council meeting in Honolulu, October 1997.

Figure 10. Sample Distribution Among Entities in the Pacific Region

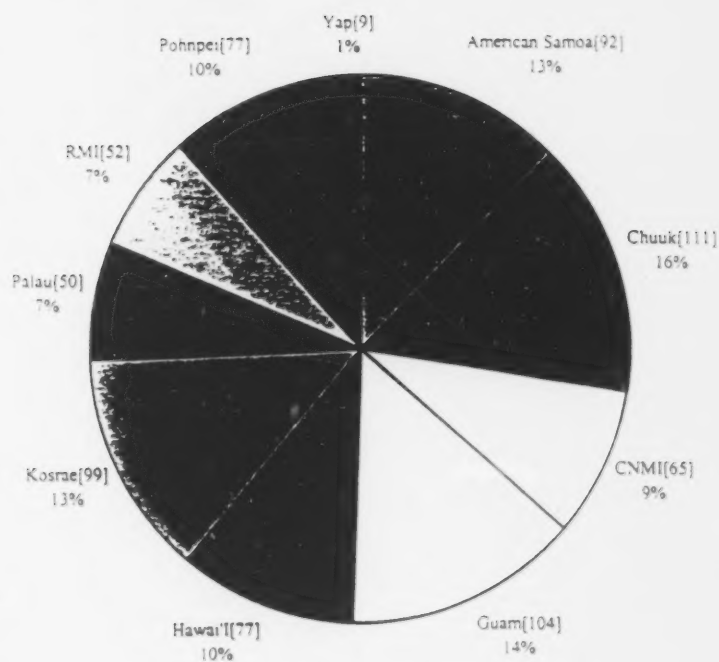


Figure 10 shows there were a total of seven hundred and thirty six participants from the Pacific region as a whole.

Figure 11. Sample Distribution Among Educational Role Groups in the Pacific Region

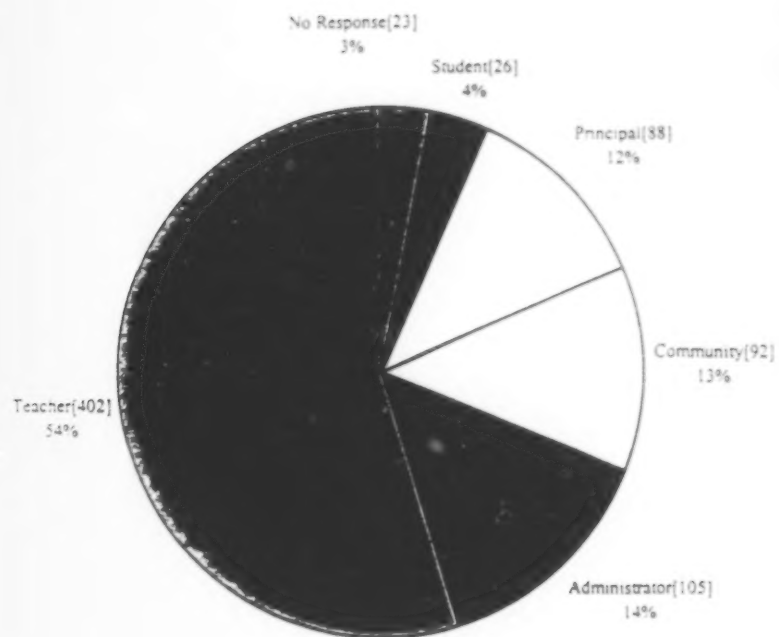


Figure 11 shows that teachers were the largest group (54%) of participants.

### Mean Ratings of the Importance of Nine Educational Need Areas

On a seven-point scale, respondents rated the importance of 47 different educational issues (1 indicates *none* and 7 indicates *very much*). The 47 responses were recompiled into nine need areas. Table 30 presents the mean ratings in the Pacific region, from highest to lowest, of the perceived importance of each educational area.

Table 30. Mean Ratings of the Importance of Nine Need Areas in the Pacific Region

| Need Area                         | Importance |
|-----------------------------------|------------|
| Systemic Reform                   | 6.38       |
| Professional Development          | 6.28       |
| At-Risk and Gifted/Talented Youth | 6.27       |
| Community/Parent Involvement      | 6.21       |
| Curriculum and Instruction        | 6.20       |
| Planning and Accountability       | 6.17       |
| Use of Technology                 | 6.15       |
| Early Childhood Education         | 6.07       |
| Language and Cultural Diversity   | 5.84       |

As shown in Table 30, *systemic reform*, *professional development*, and *at-risk and gifted/talented youth* are the educational areas perceived as having the most importance in the Pacific region. *Use of technology*, *early childhood education*, and *language and cultural diversity* are the areas perceived as having the least importance. However, the difference between the highest and lowest ratings is only 0.54, and all of the mean ratings of importance are greater than 5.8, indicating a high level of perceived importance in the Pacific in all nine areas of education.

### Mean Ratings of Progress in Nine Educational Need Areas

On a seven-point scale, respondents rated the progress in 47 different educational issues (1 indicates *none* and 7 indicates *very much*). The 47 responses were recompiled into nine need areas. Table 31 presents the mean ratings, from highest to lowest, of the perceived progress in each educational area in the Pacific region.

Table 31. Mean Ratings of Progress in the Pacific Region

| Need Area                         | Progress |
|-----------------------------------|----------|
| Curriculum and Instruction        | 4.08     |
| Planning and Accountability       | 4.03     |
| Systemic Reform                   | 4.01     |
| Professional Development          | 3.96     |
| Language and Cultural Diversity   | 3.85     |
| Community/Parent Involvement      | 3.79     |
| At-Risk and Gifted/Talented Youth | 3.73     |
| Early Childhood Education         | 3.52     |
| Use of Technology                 | 3.36     |

As shown in Table 31, *curriculum and instruction*, *planning and accountability*, and *systemic reform* are perceived as the educational areas that have seen the most progress in the Pacific region. *At-risk and gifted/talented youth*, *early childhood education*, and *use of technology* are viewed as the areas where the least progress has been made.

### Magnitude of Perceived Need in Nine Educational Need Areas

As stated, respondents rated the perceived importance and the perceived progress in 47 different educational issues on a seven-point scale (1 indicates *none* and 7 indicates *very much*). For each issue, a rating of magnitude of need was calculated by subtracting the rating of progress from the rating of importance. The 47 ratings were then recompiled into nine need areas. Table 32 presents the results, from highest to lowest, of the magnitude of need in the Pacific region in each educational area.

Table 32. Magnitude of Perceived Need in the Pacific Region

| Need Area                         | Need |
|-----------------------------------|------|
| Use of Technology                 | 2.83 |
| Early Childhood Education         | 2.61 |
| At-Risk and Gifted/Talented Youth | 2.58 |
| Community/Parent Involvement      | 2.45 |
| Systemic Reform                   | 2.40 |
| Professional Development          | 2.35 |
| Planning and Accountability       | 2.17 |
| Curriculum and Instruction        | 2.16 |
| Language and Cultural Diversity   | 2.05 |

As indicated in Table 32, *use of technology*, *early childhood education*, and *at-risk and gifted/talented youth* are perceived as the educational issues with the greatest amount of need in the Pacific region. The areas of *planning and accountability*, *curriculum and instruction*, and *language and cultural diversity* are viewed as areas with the smallest amount of need. However, the difference between the highest and lowest ratings for need is only 0.78; this suggests that although the top-rated issues are educational priorities, all educational areas are perceived as being important in the Pacific region. The findings also suggest that a conclusion should *not* be made without consulting other data sources.

### Frequency of Rankings of Importance in Nine Educational Need Areas

In order to examine rankings of importance across the nine entities surveyed, the nine needs areas were regrouped into three broad categories for each entity: very important, somewhat important, and less important. The top three educational areas for each entity were labeled as "very important." The three middle areas were called "somewhat important," and the last three areas were considered "less important." It is necessary to note that "less important" does not indicate little importance, because all areas have been identified as having high importance; the designation merely reflects *relative* importance. For each educational area, the rankings were counted. The results are shown in Table 33.

**Table 33. Frequency of Rankings of Importance in Nine Need Areas in the Pacific Region**

| Need Area/Entities Ranking        | Less Important | Somewhat Important | Very Important | Region Rank        |
|-----------------------------------|----------------|--------------------|----------------|--------------------|
| Planning and Accountability       | 3              | 5                  | 1              | Somewhat Important |
| Curriculum and Instruction        | 3              | 3                  | 3              | Somewhat Important |
| Language and Cultural Diversity   | 9              | 0                  | 0              | Less Important     |
| Community/Parent Involvement      | 1              | 7                  | 1              | Somewhat Important |
| Early Childhood Education         | 7              | 1                  | 1              | Less Important     |
| At-Risk and Gifted/Talented Youth | 1              | 3                  | 5              | Very Important     |
| Professional Development          | 0              | 4                  | 5              | Very Important     |
| Systemic Reform                   | 0              | 0                  | 9              | Very Important     |
| Use of Technology                 | 3              | 4                  | 2              | Less Important     |

According to Table 33, the regional results substantially agree with the entity rankings. *Systemic reform* is identified by all entities as an educational issue of great importance. The categories of *at-risk and gifted/talented youth* and *professional development* are also perceived as areas of high importance in the Pacific region.

### Frequency of Rankings of Progress in Nine Need Areas

The rankings of perceived progress in the nine needs areas are shown in Table 34. The category of "much progress" represents the number of entities that identified the need area as one of the top three in terms of progress. "Some progress" and "less progress" indicate the middle three and bottom three rankings, respectively. The results are shown in Table 34.

**Table 34. Frequency of Rankings of Progress in Nine Need Areas in the Pacific Region**

| Need Area/Entities Rank           | Less Progress | Some Progress | Much Progress | Pacific Region |
|-----------------------------------|---------------|---------------|---------------|----------------|
| Planning and Accountability       | 1             | 0             | 8             | Much Progress  |
| Curriculum and Instruction        | 1             | 3             | 5             | Much Progress  |
| Language and Cultural Diversity   | 2             | 4             | 3             | Some Progress  |
| Community/Parent Involvement      | 3             | 5             | 1             | Some Progress  |
| Early Childhood Education         | 6             | 3             | 0             | Less Progress  |
| At-Risk and Gifted/Talented Youth | 5             | 3             | 1             | Less Progress  |
| Professional Development          | 1             | 3             | 5             | Some Progress  |
| Systemic Reform                   | 1             | 4             | 4             | Much Progress  |
| Use of Technology                 | 7             | 2             | 0             | Less Progress  |

As shown in Table 34, *planning and accountability*, *curriculum and instruction*, and *systemic reform* are the educational areas where the most progress has been seen, according to Pacific educators. *Early childhood education*, *at-risk and gifted/talented youth*, and *use of technology* are viewed as areas where there has been less progress in the Pacific region.

### Frequency of Rankings of Perceived Need in Nine Need Areas

The magnitude of need is calculated by subtracting the rating for perceived progress from the ranking for perceived need. The largest differences indicate the greatest needs. The three categories for this analysis are "great need," "some need," and "less need." Again, these are *relative* ranks, and the category of "less need" should not be interpreted as having little need. Table 35 shows the perceived need in each of the nine educational areas.

Table 35. Frequency of Rankings of Need in Nine Need Areas in the Pacific Region

| Need Area                         | Less Need | Some Need | Great Need | Region Rank |
|-----------------------------------|-----------|-----------|------------|-------------|
| Planning and Accountability       | 7         | 1         | 1          | Less Need   |
| Curriculum and Instruction        | 8         | 1         | 0          | Less Need   |
| Language and Cultural Diversity   | 7         | 2         | 0          | Less Need   |
| Community/Parent Involvement      | 0         | 7         | 2          | Some Need   |
| Early Childhood Education         | 0         | 3         | 6          | Great Need  |
| At-Risk and Gifted/Talented Youth | 0         | 3         | 6          | Great Need  |
| Professional Development          | 2         | 5         | 2          | Some Need   |
| Systemic Reform                   | 3         | 4         | 2          | Some Need   |
| Use of Technology                 | 0         | 1         | 8          | Great Need  |

The rankings of entity very much agree with regional rankings. As shown in Table 35, the areas of *use of technology*, *early childhood education*, and *at-risk and gifted/talented youth* are perceived as the educational issues of greatest need in the Pacific region.

## Other Educational Needs

Because of the long distances between entities in the Pacific region, PREL takes advantage of any opportunities to sample perceptions of needs. When groups are convened for an educational activity, needs assessment is conducted. Such groups have included curriculum leaders, PREL's Board of Directors, mathematics and science consortium personnel, and the Research and Development Cadre. Included in the needs assessment survey is one open-ended question, which allows respondents to write down the three most important educational needs in their school systems. The following is a summary of the qualitative data collected from Pacific educators:

- *Curriculum reform and standards development* is the most critical issue among the educators in many of the entities. Programs to encourage school/community-based education, school "ownership" by the community, and parent involvement are currently being implemented. Curriculum development that is aligned with emerging economic and employment needs is underway and requires additional support in numerous locations. Student performance standards and student/classroom assessment are being developed as resources allow.
- Continuing *professional development* of teachers, principals, and central office administrators is an important issue. The terminal educational level of many teachers and administrators outside of Hawai'i is often a two-year associate degree or less. Professional development activities need long-term plans and strategies.
- *Funding* is a critical need throughout the region. Excluding Hawai'i, most of the entities in the Pacific region are developing nations. Therefore, the economies in much of the region are changing from subsistence to cash. As economics change and U.S. government support downsizes, funding levels for all educational services will be in flux. The educational needs for the region will require increasing support to prepare today's youngsters for tomorrow.

## NEED FOR FURTHER ANALYSIS

The areas for educational support that surface from this needs assessment appear to be consistent across groups and locales. However, the results present us with a curious finding: across most role groups and entities, *language and cultural diversity* is perceived as having the lowest importance and need. This is in contradiction to information gathered from discussions with major focus groups (e.g., PREL's Board of Directors, the Research and Development Cadre, and the Pacific Curriculum and Instruction Council). These groups continue to report to PREL that *language and cultural diversity* is a key area of concern. Indeed, it is so important that it is PREL's specialty area for the regional laboratory contract. Given such contradictory findings, we

begin to wonder about the way in which the needs assessment was performed and, more importantly, about the ways in which the needs of the region are analyzed.

Typically, for analytical and discussion purposes, as well as for specific training and technical assistance work, PREL examines both entity-specific and across-entity (regional) needs. Research and reports are done for these two distinct groupings. However, this may not be the most effective way to direct assistance.

The entities within our region have differing political statuses. One group, consisting of American Samoa, the Commonwealth of the Northern Mariana Islands, Guam, and Hawai'i, is frequently referred to as the *U.S. Territories and States*. The other group, made up of the Federated States of Micronesia (Chuuk, Kosrae, Pohnpei, Yap), the Republic of the Marshall Islands, and the Republic of Palau, are politically independent. This group is referred to as the *Freely Associated States*. This degree of affiliation is reflected in each entity's language usage. In the **Group 1** entities, there is a strong use of the English language, although indigenous languages are also used. In **Group 2** entities, there is a predominant use of indigenous languages, although English is also used. By analyzing needs according to these two groups, different results are obtained. Table 36 illustrates the findings of importance, progress, and magnitude of need in the area of *language and cultural diversity*; the assessment is done according to language group.

Table 36. Results of One-Way ANOVA for the Area of Language and Cultural Diversity

| Language and Cultural Diversity | Group 1 | Group 2 | Significance           |
|---------------------------------|---------|---------|------------------------|
| Importance                      | 5.67    | 6.00    | F(1, 688)=14.7, P<0.01 |
| Progress                        | 3.86    | 3.84    | F(1, 628)=0.34, P<0.85 |
| Need                            | 1.86    | 2.20    | F(1, 613)=7.52, P<0.01 |

As shown in Table 36, the results of the analysis reveal that when entities are grouped based on language use, there is a statistically significant difference in perceptions of importance and need. The differences in mean ratings of importance and need in the area of language and cultural diversity between these groups are significant at the 0.01 level.

Given this variation, perhaps further analyses of needs are warranted by different sub-regional groupings. The historical and current political organization of the entities (i.e., political status) may provide more informative data for our work in the Pacific than the current focus on entity and across-entity analyses can provide.

## APPENDIX

# PACIFIC RESOURCES for EDUCATION and LEARNING

## Regional Needs Assessment

Date: \_\_\_\_ / \_\_\_\_ / 1997

Entity: (Check only one)

- ☐ American Samoa  
☐ Chuuk State, FSM  
☐ Commonwealth of the Northern Mariana Islands  
☐ Guam

- ☐ Hawai'i  
☐ Kosrae State, FSM  
☐ Republic of the Marshall Islands  
☐ Republic of Palau

- ☐ Pohnpei State, FSM  
☐ Yap State, FSM

I am a: (Check only one)

- |                                            |                                                             |                                                                |                                                 |
|--------------------------------------------|-------------------------------------------------------------|----------------------------------------------------------------|-------------------------------------------------|
| <input type="checkbox"/> Classroom teacher | <input type="checkbox"/> Student                            | <input type="checkbox"/> Principal/vice principal              | <input type="checkbox"/> Other (specify): _____ |
| <input type="checkbox"/> Teacher aide      | <input type="checkbox"/> Central/district office specialist | <input type="checkbox"/> Central/district office administrator |                                                 |
| <input type="checkbox"/> Resource teacher  | <input type="checkbox"/> Parent                             | <input type="checkbox"/> Higher education faculty              |                                                 |

Is this the first time you have filled out this survey form in 1997? ☐ Yes ☐ No

| Educational Needs in the Pacific Region                                                           | <i>None ..... Very much</i>                          |
|---------------------------------------------------------------------------------------------------|------------------------------------------------------|
| <b>Planning and Accountability</b>                                                                |                                                      |
| 1. Obtain information about curriculum, instruction, policy development, research and evaluation. | Importance: 1 2 3 4 5 6 7<br>Progress: 1 2 3 4 5 6 7 |
| 2. Make better use of information for planning, policy development, and decision making.          | Importance: 1 2 3 4 5 6 7<br>Progress: 1 2 3 4 5 6 7 |
| 3. Improve the organization and management of the school(s).                                      | Importance: 1 2 3 4 5 6 7<br>Progress: 1 2 3 4 5 6 7 |
| 4. Determine regional and local education system needs.                                           | Importance: 1 2 3 4 5 6 7<br>Progress: 1 2 3 4 5 6 7 |
| 5. Construct and/or remodel school facilities.                                                    | Importance: 1 2 3 4 5 6 7<br>Progress: 1 2 3 4 5 6 7 |
| 6. Assure sufficient and equitable funding for all schools.                                       | Importance: 1 2 3 4 5 6 7<br>Progress: 1 2 3 4 5 6 7 |
| <b>Curriculum and Instruction</b>                                                                 |                                                      |
| 7. Improve student learning in basic skills.                                                      | Importance: 1 2 3 4 5 6 7<br>Progress: 1 2 3 4 5 6 7 |
| 8. Develop culturally appropriate curricula.                                                      | Importance: 1 2 3 4 5 6 7<br>Progress: 1 2 3 4 5 6 7 |
| 9. Provide appropriate curricula to meet economic and community needs.                            | Importance: 1 2 3 4 5 6 7<br>Progress: 1 2 3 4 5 6 7 |
| 10. Develop the Pacific region content and performance standards and curriculum frameworks.       | Importance: 1 2 3 4 5 6 7<br>Progress: 1 2 3 4 5 6 7 |
| 11. Improve current assessment practices in schools.                                              | Importance: 1 2 3 4 5 6 7<br>Progress: 1 2 3 4 5 6 7 |

| NEEDS AREAS                                                                                                    | <i>None .....Very much</i> |   |   |   |   |   |     |
|----------------------------------------------------------------------------------------------------------------|----------------------------|---|---|---|---|---|-----|
| <b>Language and Cultural Diversity</b>                                                                         |                            |   |   |   |   |   |     |
| 12. Enhance the implementation of language policies in the schools.                                            | Importance:                | 1 | 2 | 3 | 4 | 5 | 6 7 |
|                                                                                                                | Progress:                  | 1 | 2 | 3 | 4 | 5 | 6 7 |
| 13. Improve student learning of English (fluency and literacy).                                                | Importance:                | 1 | 2 | 3 | 4 | 5 | 6 7 |
|                                                                                                                | Progress:                  | 1 | 2 | 3 | 4 | 5 | 6 7 |
| 14. Improve student learning of indigenous languages (fluency and literacy).                                   | Importance:                | 1 | 2 | 3 | 4 | 5 | 6 7 |
|                                                                                                                | Progress:                  | 1 | 2 | 3 | 4 | 5 | 6 7 |
| 15. Improve cultural literacy in the indigenous cultures.                                                      | Importance:                | 1 | 2 | 3 | 4 | 5 | 6 7 |
|                                                                                                                | Progress:                  | 1 | 2 | 3 | 4 | 5 | 6 7 |
| 16. Promote multiculturalism and multilingualism.                                                              | Importance:                | 1 | 2 | 3 | 4 | 5 | 6 7 |
|                                                                                                                | Progress:                  | 1 | 2 | 3 | 4 | 5 | 6 7 |
| 17. Develop printed subject matter materials in indigenous languages.                                          | Importance:                | 1 | 2 | 3 | 4 | 5 | 6 7 |
|                                                                                                                | Progress:                  | 1 | 2 | 3 | 4 | 5 | 6 7 |
| 18. Develop printed subject matter materials in English.                                                       | Importance:                | 1 | 2 | 3 | 4 | 5 | 6 7 |
|                                                                                                                | Progress:                  | 1 | 2 | 3 | 4 | 5 | 6 7 |
| 19. Develop standardized tests in indigenous languages.                                                        | Importance:                | 1 | 2 | 3 | 4 | 5 | 6 7 |
|                                                                                                                | Progress:                  | 1 | 2 | 3 | 4 | 5 | 6 7 |
| 20. Develop standardized tests in English.                                                                     | Importance:                | 1 | 2 | 3 | 4 | 5 | 6 7 |
|                                                                                                                | Progress:                  | 1 | 2 | 3 | 4 | 5 | 6 7 |
| <b>Community/Parent Involvement</b>                                                                            |                            |   |   |   |   |   |     |
|                                                                                                                | Importance:                | 1 | 2 | 3 | 4 | 5 | 6 7 |
| 21. Identify community determined educational outcomes.                                                        | Progress:                  | 1 | 2 | 3 | 4 | 5 | 6 7 |
| 22. Develop and maintain effective school partnerships with businesses, community agencies, and organizations. | Importance:                | 1 | 2 | 3 | 4 | 5 | 6 7 |
|                                                                                                                | Progress:                  | 1 | 2 | 3 | 4 | 5 | 6 7 |
| 23. Make sure the school meets the needs of the community.                                                     | Importance:                | 1 | 2 | 3 | 4 | 5 | 6 7 |
|                                                                                                                | Progress:                  | 1 | 2 | 3 | 4 | 5 | 6 7 |
| 24. Involve the community in meeting the needs of the school.                                                  | Importance:                | 1 | 2 | 3 | 4 | 5 | 6 7 |
|                                                                                                                | Progress:                  | 1 | 2 | 3 | 4 | 5 | 6 7 |
| 25. Involve parents in the school improvement process.                                                         | Importance:                | 1 | 2 | 3 | 4 | 5 | 6 7 |
|                                                                                                                | Progress:                  | 1 | 2 | 3 | 4 | 5 | 6 7 |
| <b>Early Childhood Education</b>                                                                               |                            |   |   |   |   |   |     |
| 26. Develop early childhood programs in public schools to serve children ages 4-5 and their parents.           | Importance:                | 1 | 2 | 3 | 4 | 5 | 6 7 |
|                                                                                                                | Progress:                  | 1 | 2 | 3 | 4 | 5 | 6 7 |
| 27. Expand and improve child care services.                                                                    | Importance:                | 1 | 2 | 3 | 4 | 5 | 6 7 |
|                                                                                                                | Progress:                  | 1 | 2 | 3 | 4 | 5 | 6 7 |
| 28. Develop programs for parents of young children to improve their parenting skills.                          | Importance:                | 1 | 2 | 3 | 4 | 5 | 6 7 |
|                                                                                                                | Progress:                  | 1 | 2 | 3 | 4 | 5 | 6 7 |
| 29. Improve staff quality and ensure comprehensive services to preschool children and their families.          | Importance:                | 1 | 2 | 3 | 4 | 5 | 6 7 |
|                                                                                                                | Progress:                  | 1 | 2 | 3 | 4 | 5 | 6 7 |

| NEEDS AREAS                                                                                                                                                                           | <i>None ..... Very much</i> |   |   |   |   |   |   |   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|---|---|---|---|---|---|---|
| <b>At-Risk, Gifted and Talented Youth</b>                                                                                                                                             |                             |   |   |   |   |   |   |   |
| 30. Develop policies to provide services to at-risk youth.                                                                                                                            | Importance:                 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|                                                                                                                                                                                       | Progress:                   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 31. Develop programs to help students understand the risks of drugs, alcohol, and tobacco.                                                                                            | Importance:                 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|                                                                                                                                                                                       | Progress:                   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 32. Develop career program offerings.                                                                                                                                                 | Importance:                 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|                                                                                                                                                                                       | Progress:                   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 33. Meet individual needs of students who are at-risk of school failure.                                                                                                              | Importance:                 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|                                                                                                                                                                                       | Progress:                   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 34. Meet individual needs of the gifted and talented students.                                                                                                                        | Importance:                 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|                                                                                                                                                                                       | Progress:                   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| <b>Professional Development</b>                                                                                                                                                       |                             |   |   |   |   |   |   |   |
| 35. Provide professional development in effective school leadership to principals and other administrators.                                                                           | Importance:                 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|                                                                                                                                                                                       | Progress:                   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 36. Provide professional development in effective curriculum and instruction for teachers.                                                                                            | Importance:                 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|                                                                                                                                                                                       | Progress:                   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 37. Provide professional development in the content areas for teachers.                                                                                                               | Importance:                 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|                                                                                                                                                                                       | Progress:                   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 38. Provide professional development in assessment and test design for testing and evaluation personnel.                                                                              | Importance:                 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|                                                                                                                                                                                       | Progress:                   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 39. Provide professional development for educational specialists.                                                                                                                     | Importance:                 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|                                                                                                                                                                                       | Progress:                   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 40. Strengthen participation of institutions of higher education in professional development of public education personnel (i.e., administrators, principals, teachers, specialists). | Importance:                 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|                                                                                                                                                                                       | Progress:                   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| <b>Systemic Reform</b>                                                                                                                                                                |                             |   |   |   |   |   |   |   |
| 41. Involve teachers in the school improvement process.                                                                                                                               | Importance:                 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|                                                                                                                                                                                       | Progress:                   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 42. Involve teachers in setting standards (i.e., curriculum standards, performance standards, teacher standards, etc.).                                                               | Importance:                 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|                                                                                                                                                                                       | Progress:                   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 43. Involve communities in the school improvement process.                                                                                                                            | Importance:                 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|                                                                                                                                                                                       | Progress:                   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| <b>Uses of Technology in Education</b>                                                                                                                                                |                             |   |   |   |   |   |   |   |
| 44. Examine/identify the potential role of modern technology in the instructional process.                                                                                            | Importance:                 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|                                                                                                                                                                                       | Progress:                   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 45. Use modern technology (especially Computer Assisted Instruction) at the classroom level.                                                                                          | Importance:                 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|                                                                                                                                                                                       | Progress:                   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 46. Increase use of electronic means for information gathering, retrieval, and sharing to keep up with the latest promising practices in education.                                   | Importance:                 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|                                                                                                                                                                                       | Progress:                   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 47. Involve educators in electronic networking to share resources and enhance their professional development.                                                                         | Importance:                 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|                                                                                                                                                                                       | Progress:                   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |